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Clinical Medicine and Surgery

★ Editorial ★

Jean-Alfred Fournier

Pioneer in Syphilology

MOST laymen, and too many physicians, seem to have the impression that nobody knew much of anything about syphilis until after Schaudinn identified the *Treponema pallidum* as its cause, in 1905, and Wassermann announced his famous hemolytic test, one year later; and that nobody had made any serious and organized effort to check its ravages until Dr. Parran made its name respectable for use in general conversation.

As a matter of fact, Fracastor published a very clear and accurate clinical description of syphilis, and *gave it that name*, as early as 1530; physicians, all over the world, have been diagnosing and treating the disease, with reasonable success, for a couple of hundred years; and Fournier, of Paris, France, was writing about congenital and neuro-syphilis and the social aspects of the disease in the last decade of the Nineteenth Century, and founded the Society of Sanitary and Moral Prophylaxis (which was the beginning of the organized battle against it) four years before the causative organism was known (1901).

Jean-Alfred Fournier was born in 1832, but little seems to be known about his early life. He rose to fame after he became a professor in the Paris Faculty of Medicine and established the great venereal clinic at the Hospital St. Louis, and forced the inclusion of syphilis in the official teaching of dermatology.

Fournier was a teacher of remarkable power and brilliance, and so great was his knowledge and so clear his manner of expression, that even the dullest students could not fail to learn from him. Added to these faculties, he had a delightful speaking voice and a courteous and charming personality, so that he was universally liked and admired by patients, pupils, and all who knew him. Keen-eyed and compact of figure, one could easily have taken him for an old artillery officer.

Practically all of Fournier's active professional life (he passed to his rest in 1914) was devoted to syphilology, to every clinical and social phase of which he added some-

thing of importance. With Diday, of Lyons, he brought order out of the chaos in which the subject of congenital syphilis had floundered, theretofore. He first recognized what we now call "parasyphilis," and his statistics on the causal relation of syphilis to tabes and paresis ("Les Affections Parasyphilitiques," Paris, 1894), with those of Erb, of Germany, are, according to Garrison, the most important contributions to the literature of the subject. He founded the world-famous Museum of the St. Louis Hospital, combining with his own large collection those of Pean and Parrot, and that of the old hospital of Lourcine.

Now that syphilis is so much in the public thought, it behooves cultured medical men to recollect some of the indefatigable workers who laid the foundation for our present accomplishments in the management of this ancient disease.

Mediocrity requires aloofness to preserve its dignity. —Charles G. Dawes.

The Study of Human Beings

There are two ways in which two different types of physicians look upon sick people: They may be considered as animated test-tubes or laboratory animals, in whom the minutiae of pathologic processes may be studied, impersonally; or as suffering fellow men, appealing for succor to those who should be able and eager to help them. No man whose bent of mind might place him in the former class should even attempt or aspire to be a clinician.

Our fathers in the profession *treated human beings who were ill,* and they almost made up, in kindly sympathy and eagerness for service, the deficiencies (according to modern standards) in their scientific knowledge.

It is not, however, sufficient that we do, today, the things that were done by the great physicians of fifty or a hundred years ago. Much scientific knowledge is *here* and available, and no man can be excused for not knowing the things which he might have known had he been willing to make the necessary effort.

But, with increasing knowledge, has come, in many cases, confusion and uncertainty. Those who knew little or nothing of psychology, and nothing whatever about the endocrines, proceeded with confidence, in ignorance of these matters. We know just enough to make us realize our lack of complete and positive information, and our practice frequently suffers from the timidity engendered by a realization of our limitations. We are not so ready to put the "criminal," the "lunatic," and the "neurotic" in neat little, water-tight compartments, and dogmatize about how to handle them.

Human life is not as the lives of the dog and the horse. In addition to recognizable alterations in the structure and functions of the physical organs, we must reckon with complicated emotional and mental reactions, arising by reason of our complex human relationships. The physiologist and the pathologist can no longer give us all the information we need to practice medicine satisfactorily: We require the help of the psychologist, the sociologist, the economist, and all the others who are studying *men,* from any aspect whatever.

This need has, at last, been recognized and a step toward meeting it was taken with the establishment, in connection with Yale University, of an Institute of Human Relations, the Medical and Law schools collaborating in coordinating and studying the material at hand and in collecting new material, and other departments joining in as they became interested and showed that they had something to add to the consideration of the problems involved.

Here is an evidence of progress in the right direction, and much will be gained, if it convinces certain physicians that a sick man is not a Robot, to be repaired as one would repair a broken-down sewing machine, but a human soul, reacting with and being reacted upon by other human souls, all of them incased in physical, emotional, and mental bodies which are highly susceptible to the effects of these reactions.

When all physicians are regularly practicing medicine upon such a basis as this, we will see fewer failures in treatment and a greater degree of confidence and happiness in the exercise of the healing art, founded upon and supported by all branches of modern science; but if State Medicine becomes a reality, such a condition of things will be indefinitely postponed, because, under such political auspices, patients *must* be treated like Robots if the physician is to make a living.

Never utter these words: "I do not know this, therefore it is false." One must study to know; know to understand; understand to judge.—Apothegm of Narada.

The Christmas Candle

THE PLEASANT CUSTOM of lighting a candle in the window on Christmas Eve has come down through the ages, and the mother with her two children on this year's Christmas Seal links that seasonal ritual with the idea of family and home. The message of the Seal is, "Protect your home from tuberculosis." To carry out the suggestion of earlier days the three characters are costumed in the formal style of the Victorian Era, the period when "Home" was idealized and holiday customs meant much to old and young alike.

The health situation in those days, however, was in a sorry state. That is why it is well to realize, as we buy and use our 1938 Christmas Seals, that we are living in an age when modern methods and intelligent cooperation have completely revolutionized health conditions in our country. In the middle nineteenth century, for example, people did not even know that tuberculosis was contagious. Although Koch had discovered the germ that causes the disease in 1882, it was many years before the public learned the way infection spreads. In homes of those days any one who had consumption was considered doomed to death—he was kept indoors and watched over resignedly by his sorrowing family. When other members broke down with the "wasting sickness" they never realized that they had been infected by the coughing victim—they believed tuberculosis was inherited. The treatment prescribed then by the best physicians was exercise or an ocean voyage, plus many tonics.

In 1885 Trudeau established modern sanatorium treatment of tuberculosis in this country and rest became recognized as all-important. Today we have advanced still further and, through the tuberculin test and x-ray studies, are able to detect tuberculosis in its early stages, when cure in most cases may be effected.

The death rate from tuberculosis, for years the leading cause of death, has been cut more than two-thirds since the turn of the century. Each year finds the public better informed in the need for prevention. Yet tuberculosis still takes more lives than any other sickness during the ages between 15 and 45. Until that important group of people have been protected, the educational work of the Christmas Seal must be continued.

Everyday Therapeutics

WHEN THE YOUNG PHYSICIAN of today finishes his internship and is ready to offer his services to the public, he is usually satisfactorily equipped to do a laparotomy, make a Wassermann test or a blood chemistry study, interpret an electrocardiogram, diagnose a case of pellagra, Hodgkin's disease, pernicious anemia, ectopic pregnancy, and various other disease states which are chiefly interesting because of their comparative rarity; but what does he know about the management of corns and bunions, common, old-fashioned bellyache, "muscular rheumatism," "catarrh of the stomach," and a thousand and one everyday ailments which make up seventy-five or more percent of the ordinary day's problems of the practitioner?

The modern medical curriculum is so crammed with the newest ideas (many of which will, in ten years, be found to be erroneous) and with smatterings of specialistic details and laboratory research, that there is no time to "waste" on the common, ordinary ills of life, which any physician is supposed (God knows why!) to be able to manage satisfactorily by the light of some aura which will exude from his intellect as soon as he is entitled to write the magic letters, M.D., after his name.

Our fathers (and some of us) had a rather different training. We went to college, of course, but we also "read medicine" and "rode with" a preceptor—an old, experienced physician—and we saw, at first

hand, how he dealt with the small and middle-sized ailments of his patients, old and young. We gained a type of practical knowledge which the schools do not, and never can, exactly, give.

Right now the medical periodicals are publishing too much "highbrow stuff" and not enough vulgar, everyday therapeutics. To a certain extent, that applies to CLINICAL MEDICINE AND SURGERY, as well as to other journals. We can publish only the material which is sent to us, and even our contributors (who are exceptionally practical men) have a tendency to make much of the rarer conditions and to overlook the simpler maladies.

Among our readers are many who have seen long and valuable years of rich clinical practice and who have hundreds of sound and worthy ideas about the management of the ordinary physical disorders of human-kind. If they could be persuaded to overcome their modesty and reticence they could give us much help with our daily problems. Some are already doing so, thank goodness!

This is a plea to our readers, all over the world, to send us their favorite formulas or procedures—methods that *work*—so that their thoughts and labors may not be lost to the world, but may be put to use by their brothers in the profession.

Let us have more articles, big and little, dealing with common everyday therapeutics—the diagnosis and treatment of mumps, measles, whooping cough, "sour stomach," "neuralgia," "sore throat," sprains, stonebruises, coughs, carbuncles, ingrown toe nails, and the other "simple little things," by the treatment of which most of us earn a living.

Good English and clean, well typed manuscripts are fine; and they are important—but *ideas* and *accurate, carefully kept records* are more so. Send us beautiful articles if you can, but send us *practical* articles in any case and, if your writing is decipherable and you have something to say, we will fix them up, or tell you how to do so.

To the patient—and to the conscientious physician, also—there *are* no "little things." How do *you* treat the "little things" that loom so large in the minds of sick folks?

NEXT MONTH

(Medical Progress Number)

Several of the leading medical men of the country will express their views regarding the most important recent developments, in a symposium, "Progress in Clinical Medicine."

Dr. Herman J. Achard, of Glendale, Calif., will discuss Progress in Endocrinology.

Dr. Maximillian J. Hubeny, of Chicago, will present some of the newer developments in roentgenology.

Dr. Frank Thomas Woodbury, of New York City, will describe a highly important new development in physical therapy (selective radio-frequency treatment).

Dr. Bengt Norman Bengtson, of Chicago, will sum up the progress made in the treatment of alopecia with pituitary products.

Ralph P. Creer, principal photographer to the Veterans' Facility, Hines, Ill., will show (with illustrations) the recent progress in medical photography.

COMING SOON

"Circumcision with a Long Skin Flap," by K. P. A. Taylor, M.D., F.A.C.S., Havana, Cuba.

"Anemia of Colon and Rectal Origin," by Chas. J. Drueck, Sr., M.D., F.A.C.S.

DECEMBER

Bring rare wines
And strange mistletoe
For the birthday of a King
And of a New Year. Let songs pour forth
And let the glad, sweet bells ring
Over gleaming snow,
Through tall pines.

G. B. L.

* *Leading Articles* *

Vaginal Hysterectomy by the Clamp Method

By

M. O. Robertson, M.D., Bedford, Ind.

THE MEDICAL profession in general has missed one of its greatest opportunities for relief of women, by its failure to make wider use of hysterectomy by the vaginal route and the clamp method, as advocated by the late Dr. Joseph Price, and his successor, Dr. James W. Kennedy, of Philadelphia. This procedure is one of the simplest of major operations, and is borne by the patient better than any other within my knowledge.

So many women are suffering from uterine prolapse alone, as well as many other conditions in which this operation is indicated, that it is a reproach to our profession to allow so many women to continue to suffer. I have seen extensive prolapse in the well-to-do and intelligent, as well as in the indigent and ignorant. Why such a condition exists, in a country where surgery has made such progress, is certainly puzzling.

Women who are in their seventies will withstand this operation well, and should not be denied its benefits. Dr. Kennedy closes the chapter on Vaginal Hysterectomy, in his book, "Practical Surgery of the Abdominal and Pelvic Regions," with this paragraph: "Vaginal hysterectomy has the broadest field of usefulness, the lowest operative mortality, and the best postoperative history of any major operation in surgery." I can verify that statement, from personal experience.

On describing this operation to a colleague, he said, "It sounds crazy." If that opinion is general among members of the profession, perhaps that is why it has been so neglected. If given a sincere trial, no doubt it will come into its own sphere of usefulness, for it is not "crazy," though it may seem so to some, because of its simplicity. The only contraindications are disease of the uterine adnexa and tumors too large to be delivered through the vagina.

Technic

The operation is performed in the following manner:

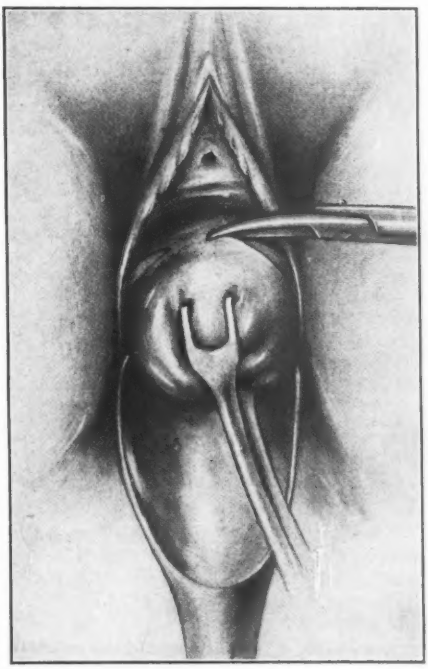


Figure 1* shows the continuation of the posterior semilunar incision around anteriorly to the cervix, uniting the two extremities of the posterior cut, thus completing a circular incision of the cervix. The vulsellum is seen pulling the cervix down, in order to expose as much of the vaginal fornix anterior to the cervix as the operator cares to remove. The speculum may be manipulated in that direction which best exposes the tissues to be removed.

If this anterior cut is made with boldness and is as close to the junction of the bladder and vaginal fornix as is possible, it will be found that the vaginal fornix is easily pushed forward, exposing the bladder.

*All of the halftones illustrating this article, with their accompanying legends, are reproduced from Dr. Kennedy's book, "Practical Surgery of the Abdominal and Pelvic Regions" (1937), by special permission of the publishers, F. A. Davis Company, Philadelphia.

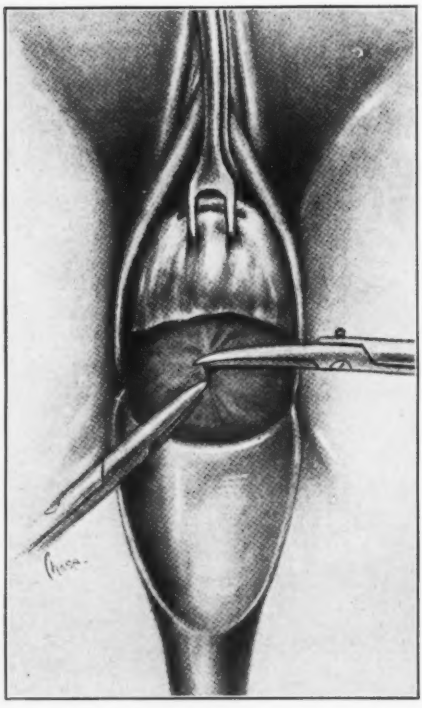


Figure 2 indicates a safe and convenient method of entering the cul-de-sac, if the peritoneal cavity has not been broken into when the vaginal tissues were being pushed back by the fingers. I have never seen the viscera injured by cutting into the peritoneal cavity by this method.

1.—The vagina is *thoroughly* cleansed with soap and sterile water (Dr. Kennedy uses a brush), and painted with some non-irritating antiseptic, such as tincture of Metaphen or Merthiolate.

2.—The cervix is drawn down with a tenaculum, grasped with vulsellum forceps (position shown in Fig. 1), brought down to the vulvar opening, and strong traction made upward and to the right. At the same time a deeply-concave Sims' speculum is inserted into the vagina and traction made in exactly the opposite direction: i.e., downward and to the left.

3.—With scissors, a bold incision is made around the cervix, beginning on the left, well up in front, and is continued around posteriorly, and up on the right, opposite to where it began. The traction on the vulsellum is made, pulling the cervix away from the side on which the scissors are cutting, while the assistant follows the scissors with the speculum, so that, when the incision is completed, the traction on the vulsellum and the traction on the speculum are at exactly opposite sites to those occupied at the beginning. The anterior and upper portion of the cut around the cervix is made last, in order that no blood may trickle over the operating field (see Fig. 1). Care should be taken not to cut the bladder, but a rather bold incision is best, after which it is an easy matter to wrap the finger with gauze and dissect the tissue from the uterus by pressing against that organ. It may be necessary to clip the peritoneum entering the posterior cul-de-sac (see Fig. 2), but at times it will be entered by the dissecting finger. I always dissect posteriorly first, then anteriorly.

4.—After the posterior cul-de-sac is entered and widened sufficiently, by forcibly stretching the tissues with the index fingers inserted into the opening, while the cervix is pulled upward and forward, the uterus is gradually delivered posteriorly, using

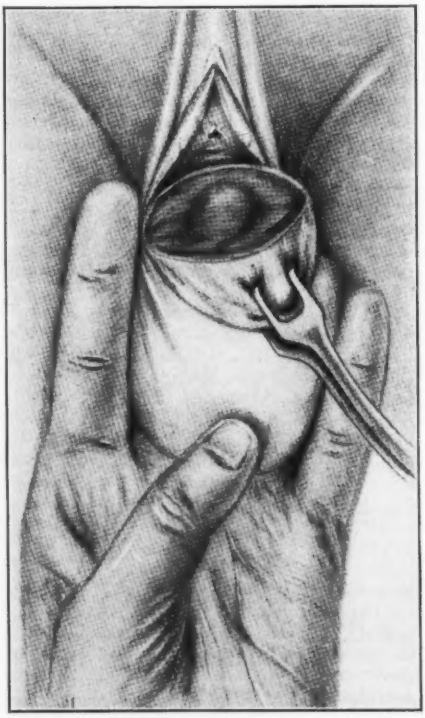


Figure 3 illustrates the termination of the manipulation just described, the finger showing in the vesico-uterine space. This is one of the steps which makes the operation, as Price did it, quite free from bladder injury. One can easily see the limits of the bladder, as the left middle finger can distinctly be seen in the vesico-uterine space, with the bladder above and the retracted cervix below. As a rule it is very easy to tear the peritoneal tissue over the finger and thus deliver the finger into plain view; but the tissue is occasionally very difficult to tear, and then one must cut down on the finger with the scissors.

two prostatic (hooked) retractors, applied successively one above the other, thus gradually bringing the fundus down.

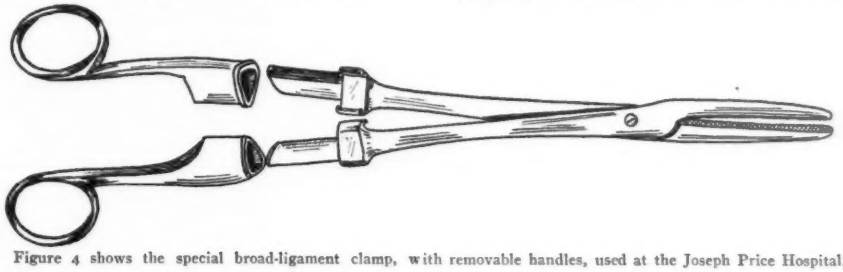


Figure 4 shows the special broad-ligament clamp, with removable handles, used at the Joseph Price Hospital.

5.—After the fundus is delivered, the finger is inserted through the posterior opening and up around the broad ligament, and the anterior opening made. This is one of the distinguishing features of this form of hysterectomy, and is one of the steps of safety, permitting the passing of a finger around the broad ligament into the vesico-uterine space and thus defining the margin of the bladder (see Fig. 3).

6.—A cut is then carefully made, with scissors, opening the anterior cul-de-sac (if the tissues cannot be readily torn with the finger). The anterior opening should be stretched, holding the left middle finger firmly in place, with the fundus in the left hand, and pulling against it with the right index finger, until the broad ligaments, at their attachments to the uterus, are distinctly visible, thus making the further steps of the operation safer and completely manageable.

7.—The finger is used now as a tractor to bring the uterus down into view so that the clamps may be more readily applied; as a guard to hold back and protect the intestines; and also as a guide in the application of the clamps.

At this point, great care must be taken not to make too much traction on the vulsellum, lest the broad ligament be torn, resulting in profuse hemorrhage from the uterine vessels. If such an accident should occur, seize any accessible part of the vaginal fornix or broad ligament with a hemostatic forceps. If the bleeding continues, make traction on the first forceps and place another above it. If this does not control the hemorrhage, the same maneuver may be repeated, "hand over hand," until the bleeding vessel is secured and ligated.

8.—When the right broad ligament is fully exposed, a strong broad-ligament clamp is carefully and firmly applied, being sure to include all the important vessels. Ordinary clamps of this type may be used, but it is much more satisfactory, especially to the patient, if the special clamps, with removable handles (sketched in Fig. 4) are employed, as the handles of common broad-ligament clamps are clumsy and become decidedly uncomfortable before they are removed.

9.—The right broad ligament is now carefully severed with scissors, distal to the clamp (see Fig. 5); the clamp holding the ligament is passed well up into the pelvis, and the handles removed (if the special clamp is used); and the same maneuvers are repeated on the left side, the surgeon's left middle finger passing over to the left side, to act as a guard, guide, and tractor, and his left forefinger taking its place in preventing descent of the intestines. With the severing of the left broad ligament, the uterus lies free in the surgeon's left hand, which has been in complete control of the situation, from step 6 onward.

Figures 6 and 7 clearly show the appearance of the broad ligaments just after they have been clamped and severed, and (diagrammatically) their position after the clamps have been passed up into the pelvis, where they are left for 48 hours.

10.—Before passing the clamps up into the pelvis, minor bleeding, if any, from the circular incision through the vaginal fornix, is controlled by hemostats, which are left in place, no ligatures being used throughout the operation, in uncomplicated cases.

11.—With the protruding ends of the clamps, and any hemostats that may have been applied, held slightly apart by an assistant, and the posterior vaginal wall held down by a Sims' speculum, gauze drains are passed, with dressing forceps, up into the pelvis about as high as the proximal ends of the clamps and into the space formerly occupied by the uterus, but not too tightly placed. This pack should be firmly steadied with the forceps when the speculum is removed, so that it may not be displaced.

Postoperative Care

The after care of the patient is the same as in any other major operation, but

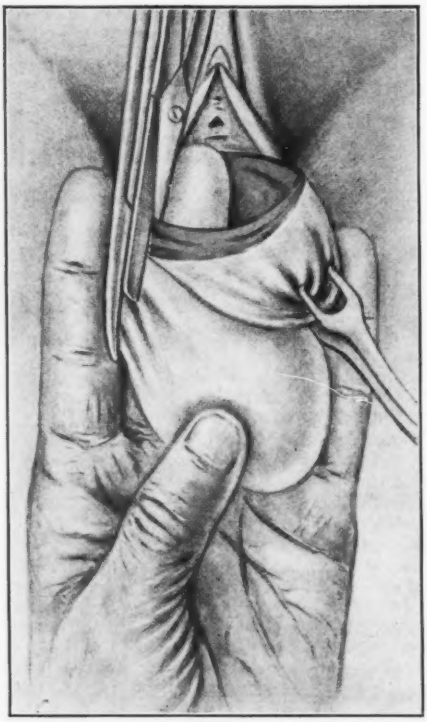


Figure 5 shows the clamp in place and the method of incision of the broad ligament. The finger is seen acting as retractor and guard by pulling the uterus down and preventing the intestines from prolapsing against the ligament and being injured by the scissors. The ease with which the vaginal hysterectomy can be done depends largely upon the length or mobility of the broad ligaments.

In this figure it can be seen how easy it would be to apply the clamp to the broad ligament. In a certain percentage of the cases it is difficult to bring the uterus as far down as this figure shows, but one can always expose a sufficient portion of the ligament, and when such clamped portion of the ligament is incised, the remainder is more easily exposed.

usually those who are not familiar with this operation will be surprised to find that the patient is not very ill, has little or no pain, and is not even very uncomfortable. She should be kept on her back for about 18 hours, but this is not essential; she can be turned earlier without danger. Because of the gauze pack, the patient should be catheterized for 48 hours, to prevent soiling of the vaginal drains.

The drains should be removed at the end of 48 hours, just before taking off the clamps and any hemostats that may have been used, so that bleeding will not be caused by pulling the drains loose where they have stuck to the raw tissues. After the drains are removed the clamps are taken off also, and no other drains are ever inserted. Any bleeding which may occur can be controlled by elevating the foot of the bed and administering ¼ grain (16 mg.) of morphine.

If there is an offensive odor, as is present at times, a *low* douche may be given *at the end of two weeks*. By this time the opening in the vaginal fornix is sufficiently closed to prevent abdominal infection from entering from below.

Comments

If done with care, there can be no excessive bleeding from this operation, and the bladder will not be entered. These are the only possible dangers of the operation, and either can be remedied easily.

If the bladder should be entered, it can be readily and quickly repaired, and will heal readily if a catheter is anchored in place for a week, to facilitate emptying without distention; or frequent catheterization will suffice (some operators use this method entirely).

Bleeding may occur as a result of tearing the broad ligament in bringing the uterus down to apply the clamps. If it does, the systematic method of applying forceps over

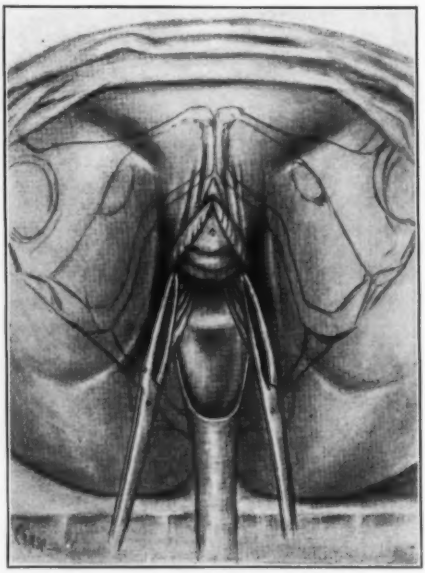


Figure 6 illustrates the elongation of the broad ligaments which takes place in the extensively prolapsed uterus or true procidentia of the organ. It can be seen that the clamped extremities of the broad ligaments extend quite well outside of the vaginal cavity. Compare the location of the forceps in Figure 6 with that in Figure 7, and it can be seen what was meant in mentioning vaginal hysterectomy for procidentia of the uterus, as it will be apparent how the vaginal fornix has been carried high in the pelvis, to practically its normal position, and held there by the rigid clamps. This is a very important factor in effecting the cure of extensive cystocele and rectocele.

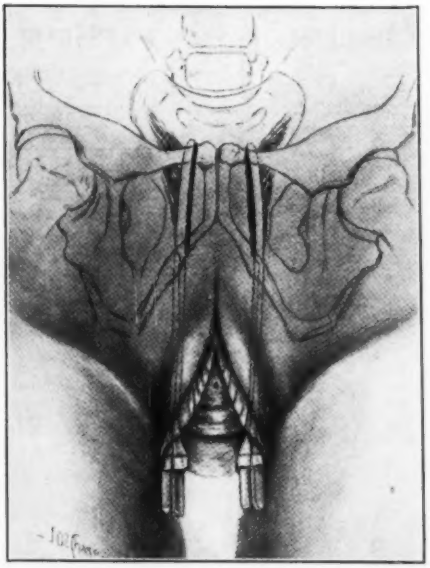


Figure 7 illustrates how the broad ligament and the vaginal fornix have been carried to a high level by the clamps, when compared with Figure 6. It can here be seen that, when the space between the clamps is filled in with fibrous tissue and the extremities of the broad ligaments have retracted, as they do after removal of the clamps, just how well the vaginal fornix is held at this high point and how this would aid in correcting the marked prolapse of the vagina, bladder, and rectal wall.

forceps, to locate the vessel for ligation, will be all that is needed.

This operation can be performed to advantage in cancer of the cervix, and many can be treated by this method, who cannot be operated upon by the abdominal route. Operation for carcinoma of the cervix is not considered good practice today, because so many were not only unhelped, but death was hastened thereby; but this is not true of this operation. Personally, I have seen patients with only a suspicious lesion given radium, and death has occurred within less than 12 months. I feel sure, in such a case, that life would have been much prolonged by the operation here described. In all such cases, however, the cervix should first be thoroughly cauterized.

The greatest and commonest indication for this operation, in my opinion, is the extensively prolapsed uterus in women past 45 years of age. It will be the choice because it will produce far less reaction than a ventral fixation, and, in the patient with great prolapse, will be the only method that will give complete relief. There must, of necessity, be a proper repair of the cystocele, which is always present, at the time of this operation, and of the perineum, if required, at the time of the hysterectomy, or within 18 to 20 days thereafter.

Other indications for the operation are fibromyoma and extensive lacerations of the cervix which are suspicious of malignant disease. There will be little more reaction from this operation than from an extensive repair of the cervix or perineum.

These patients should remain in bed for three weeks, to allow the fibrous plug to fill the space above; and this plug becomes the keystone in the arch which prevents any future prolapse.

SEIZE OPPORTUNITY

Keep your mind on the great and splendid thing you would like to do; and you will find yourself unconsciously seizing upon the opportunities that are required for fulfillment of your desire.

All things come through desire and every sincere prayer is answered.

Carry your chin in and the crown of your head high. We are all gods in the chrysalis.—ELBERT HUBBARD.

PERSONALITY

Biologically, the essence of real personality is, first, that it is organized, and second, that on each of its many faces it can, if I may put it metaphorically, enter into action at a certain point, but with its whole content of energy available behind that point.—JULIAN HUXLEY.

CONFIDENCE AND DESPOTISM

Confidence is everywhere the parent of despotism. Free government is founded in jealousy and not confidence; it is jealousy and not confidence that prescribes written constitutions to bind down those whom we are obliged to trust with power.—THOMAS JEFFERSON.

Notes from the Mississippi Valley Medical Society

Reported by
GEORGE B. LAKE, M.D., Waukegan, Ill.

THE fourth annual meeting of the Mississippi Valley Medical Society was held, late in September, at Hannibal, Missouri—a city full of interest for all lovers of "Mark Twain" (as who is not!). Here the devotee could gaze upon the historic location of the high-board fence, in connection with the whitewashing of which Tom Sawyer demonstrated his business acumen and diplomacy (marked with a sign-board not shown in the picture); the back window from which Tom used to shinny down the rain-pipe; the home of Becky Thatcher, across the way; the "pirates' cave"; and the broad, turbid river, which was the scene of so many of the adventures of Tom and Huckleberry Finn.

The Home of "Mark Twain," with Mr. Clemens himself standing in the doorway.

The meetings were held at the Hannibal-La Grange Junior College, two miles from the city (but with excellent transportation generously provided or available), and more and more are assuming the character of a real, if condensed, postgraduate course. The attendance was about 300, and should have been at least twice that—and *will* be as soon as the physicians of the Midwest wake up to the value of the splendid opportunity that is being offered them every year, at trifling expense.

Exhibits

The scientific and technical exhibits were not numerous, but were well chosen; and a clever device, which I have not encountered before, was used to make sure that all the doctors were present in the exhibit hall several times a day. At the registration desk every registrant was given the stub of a card similarly numbered, and the card was deposited in a box. At each intermission, a card was

Hannibal La Grange Junior College

drawn, with due ceremony, and the holder of the corresponding stub received a valuable present, donated by one of the exhibitors, *if he claimed his prize in 30 seconds;* if not, another card was drawn.

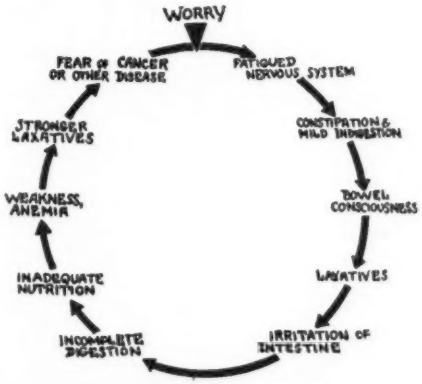


Fig. 1:—Tidmarsh's Vicious Cycle.

The special prize of $100, and a medal, were awarded to Dr. I. C. Brill, Assistant Professor of Medicine, University of Oregon Medical School, Portland, for his essay, "Failure of the Circulation: Types and Treatment." The award for distinguished service to medicine went to Dr. Vilray P. Blair, plastic surgeon, of St. Louis.

In the *scientific exhibit*, the first prize went to Drs. Graham Asher, George Walker, and Frank Hoecker, of Kansas City, for their "Lag-screen electrocardiogram—a new all-electric cathode-ray electrocardiograph," an ingenious apparatus designed to permit the immediate, bedside reading of electrocardiograms, comparable to the use of the fluoroscope in x-ray studies.*

The second prize was awarded to Dr. Sherwood Moore, of St. Louis, for his demonstration of body-section readiography, a method which makes it possible, through coordinated, synchronized movement of the x-ray tube and film, to readiograph a *given layer* of the body, to the more or less complete exclusion of the layers above and below.

Among the other scientific exhibits, probably the one of most general interest was that of Drs. W. D. Paul and J. E. McFarland, of Iowa City, Ia., illustrating the treatment of functional bowel disease ("the chronic constipation syndrome"). In this connection, the schematic drawing of "Tidmarsh's vicious cycle" (see Fig. 1) was highly instructive.

In the *commercial exhibit*, the "little thing" which probably interested general clinicians most was a new micro-reagent for the *instantaneous* detection of sugar in the urine, shown by the Denver Chemical and Manufacturing Co., of New York City, and known as *Galatest*. (I am sure that the manufacturers will be glad to send literature and a specimen quantity for testing to any of our readers who write for it, mentioning this Journal).

The Dr. J. J. Singer portable pneumothorax apparatus, which makes it quite practicable to carry out this procedure at the bedside, and sells for a moderate price, was also of considerable general interest.

Dr. G. Wilse Robinson, Jr., of Kansas City, Mo., showed a highly interesting film illustrating the insulin shock treatment. This film may be borrowed for showing by any responsible medical group which is willing to pay the transportation charges both ways.

Here follow abstracts of a few of the highly practical and instructive lectures and dry clinics which were presented.

PROCTOLOGIC PROBLEMS

By Clement L. Martin, M.D., F.A.C.S., Chicago, Ill.
Prof. of Proctology, Loyola Univ. School of Med.

Doctor Martin*

The indications for **proctoscopy** are: (1) Lower left pelvic pain; (2) rectal bleeding; (3) recurrent diarrhea; (4) recent and progressive constipation in middle-aged patients; (5) for the further study of lesions found with the finger.

Fissure in ano: Not every crack in the anal verge is a fissure. A true fissure is a simple, single *ulcer* in the anal skin, which starts from a crypt and works down. Constant tension and motion give it no chance to heal. The edges become undermined, so it has no chance to drain completely. Sometimes an abscess forms. Sphincter spasm is always present.

Some fissures heal spontaneously. If not, they probably need operation after about three or four weeks. Do not try to do too much, if manipulation is painful, without using a local anesthetic.

The first step is a *detailed anatomic diagnosis*, carefully recorded. The overhanging

*See *Am. Heart. Journ.*, July, 1938.

*These portraits, as well as the picture of the Hannibal La Grange Junior College, were loaned to us by the Mississippi Valley Medical Society.

edges must be removed. Apply a local anesthetic ointment (Eucupin, procaine, or other) to control pain; with a fine needle, inject 1-percent procaine solution, followed by 5 minims of a 10-percent solution of quinine-urea hydrochloride; use the electrocautery, *gently*, and apply tincture of Metaphen or Merthiolate. Digital *dilatation* (not divulsion) may be done, under nitrous oxide gas anesthesia.

Surgical treatment begins with digital dilatation, followed by simple *incision* (cutting through the floor of the ulcer), or *excision* (taking out the entire ulcer and letting it heal by granulation, with daily applications of heat and antiseptic dressings). The latter method should be used in chronic fissures with indurated edges.

Severe cases of **pruritus ani** cannot be cured by a surgical operation. Alcohol injections, through multiple punctures (Stone's technic), are the best treatment.

Half of the cases of *hemorrhoids* can be treated successfully by the injection method, but the technic is as difficult and important as that of open surgical operation.

CORONARY DISEASE AND ANGINA PECTORIS

By I. C. Brill, M.D., F.A.C.P., Portland, Ore.

Asst. Prof. of Medicine, Univ. of Ore. Med. Sch.

Doctor Brill

Angina pectoris results from anoxemia of the myocardium from any cause, notably (but not always) from coronary artery disease. The pain is *substernal*, not at the apex of the heart, as in neurocirculatory asthenia. *Provocative factors* are almost always present. The attacks are brief and paroxysmal. The *prognosis* depends upon the cause. Death may occur without demonstrable pathoses.

Treatment of Angina Pectoris

The attack

1.—Stop the provocative factors
2.—Give nitroglycerin, 1/250 to 1/100 grain.

In the Intervals

1.—Regulate the patient's life
2.—Treat the basic disease (syphilis, diabetes, etc.)
3.—Drugs
   A. Xanthines (over long periods)
   B. Quinidine
   C. Codeine
   D. Barbiturates (in special cases, but *never* in combination with xanthines)
   E. Tissue extract
4.—Surgery

Prophylactic

Give nitroglycerin or erythrol tetranitrate or both, *prior* to *necessary* causative effort or other conditions known to precipitate attacks. (The effect of nitroglycerin begins at once and lasts from ½ to 2 hours; that of erythrol tetranitrate begins after 30 minutes and lasts for several hours).

Coronary Artery Disease

The causes of coronary disease are atherosclerosis, occurring in middle-aged men with hereditary high blood pressure; diabetes; psychic or physical strain; and disturbed cholesterol metabolism.

Types

1.—Diffuse sclerosis, with angina, heart block, ectopic beats, etc.
2.—Sudden occlusion, with sudden death, or a typical attack with severe, prolonged pain, fever, and other symptoms, or dyspnea without pain.

Differential Diagnosis

Angina	Coronary Dis.
Pt. Immobile	Pt. Restless
No fever	Fever
Attack short	Attack long
No leukocytosis	Leukocytosis
Sed. rate normal	Sed. rate increased
Provocative factors	No Provoc. factors
Pt. O.K. after attack	Pt. must be kept in bed a long time (Minimum 6 weeks)

A negative electrocardiogram does not exclude coronary disease.

Prognosis

1.—The younger the patient, the better.
2.—Worse if there have been previous attacks.
3.—The more stable the electrocardiogram, the better.
4.—The longer the fever, leukocytosis, and increased sedimentation rate, the worse.

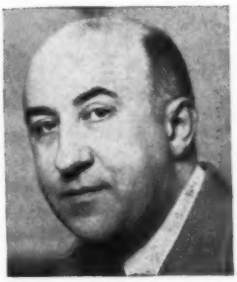
Treatment: In the diffuse type, the treatment is the same as in angina pectoris, adding oxygen, morphine, digitalis, or aminophyllin, as indicated.

In 25 percent of the cases, relief is obtained by removal of the upper four *dorsal* sympathetic ganglia.

In some cases, the pectoral muscles have been transplanted to the heart, to reenforce the infarct and give a new blood supply.

PRACTICAL BEDSIDE NEUROLOGY

By LeRoy H. Sloan, M.D., F.A.C.P., Chicago, Ill.
Prof. of Med., Univ. of Illinois Coll. of Med.



Doctor Sloan

Hemiplegia, in a middle-aged person, is usually due to cerebral hemorrhage. In young people we must look further. For instance, in a boy of 17 years, with a rheumatic heart condition or subacute bacterial endocarditis, it may be due to cerebral embolism.

In cases of suspected hemiplegia, a sign which is useful, even when the patient is comatose, is to lift up an arm or leg and let it drop. If it falls *straight down*, like a stick of wood, the case is one of hemiplegia.

When a man of 75 years or more gets up in the morning and starts for the bathroom, but doesn't make it, the trouble may be due to a "stroke" from cerebral thrombosis, or to hemorrhage from a peptic ulcer.

A *young person*, who has complained for some time of *general headaches* (all over the head), with occasional nausea and vomiting and who shows paralysis of the *lower part* of the face, with speech disturbance, probably has a *brain tumor*. Later, tactile sensation is lost.

Spastic paraplegia is the commonest neuropathosis in Europe, and is becoming more common in the United States, under the name of **multiple** or **disseminated sclerosis.** This disease is *not* tabes. An early symptom is a sudden inability to pass urine. Other symptoms are nystagmus, intention tremor, a *spastic* gait, *bilateral* Babinski's sign, and temporary unilateral blindness, with pallor of the *outer half* of the optic disc.

Patients with *tabes* show euphoria, a *steppage* gait, lost reflexes, unequal pupils which react to accommodation but not to light, and pallor of the *entire* optic disc.

A patient of 50 years or more, who is diabetic or a heavy drinker, and who complains of numbness and tingling of the fingertips and toes and tender muscles, and shows diminished reflexes, is probably suffering from **polyneuritis.**

If the tongue is unnaturally smooth and the patient has lost the sense of vibration of a tuning fork, the case is one of *pernicious anemia.*

Comatose States frequently present difficult problems in diagnosis.

As a mnemonic trick, I have taught my students the artificial word TAMASUME, made up of the initial letters of the principal causes of coma, in the order of the frequency of their occurrence, thus:

Trauma (about 35 to 40%)
Apoplexy (about 25%)
Meningitis—infections (about 6 or 7%)
Alcoholism
Sunstroke
Uremia (about 4 or 5%)
Morphinism (or other drugs)
Eclampsia, Epilepsy, etc.

We must then consider the *mode of onset* of the condition, whether sudden or gradual.

Sudden Coma

I. Cerebral Insults
  1.—Skull fracture
  2.—Cerebral hemorrhage
  3.—Cerebral thrombosis
  4.—Cerebral embolism
  5.—Cerebral concussion
II. Carbon monoxide poisoning
III. Anesthesia
IV. Heat *stroke*
V. Stokes-Adams syndrome
VI. Subarachnoid hemorrhage

This last-named condition is increasing in frequency. An apparently healthy child is suddenly bowled over by *headache*, accompanied by a stiff neck and a positive Kernig sign (which is diagnostic). A spinal tap reveals pure blood. The *treatment* is repeated spinal punctures, increasing the intervals as the symptoms improve.

Gradual Coma

Alcohol
Drugs (morphine, luminal, veronal, etc.)
Infections (meningitis, encephalitis, typhoid, malaria, etc.)
General diseases (uremia, diabetes, eclampsia, cholemia, and rarely, cirrhosis of the liver)
Exsanguination (postoperative, ulcer, ectopic pregnancy, anemia)
Insulin shock.

Differential points in gradual coma:

In *morphine* coma, the patient rubs his nose. After *luminal* there is nystagmus and cyanosis. In suspected *uremia*, pass the hand over the skin and look for crystals on it ("uremic frost"); look for high blood pressure and blood urea nitrogen, and for hemorrhages in the eyegrounds. The coma of *insulin shock* comes on after semi-delirium, and the patient is pale, cold, and sweaty.

Diagnosis of Coma.

Take a *history* of the case (as complete as possible), and look for:

1.—Flushed face (if cherry-red, carbon monoxide)
2.—Injection of the conjunctivae
3.—Odor of the breath
4.—Bleeding from the nose or ears

5.—Abnormalities of the pupils (a large, fixed pupil suggests middle meningeal hemorrhage)
6.—Evidence of an injury
7.—Sudden or slowly-developing cyanosis.
8.—Previous high blood pressure
9.—Convulsions
10.—Paralysis
11.—Stiff neck
12.—Kering and Brudzinski signs
13.—Laboratory tests
  A. Complete urinalysis
  B. Blood-sugar test
  C. Urea-nitrogen test
14.—Special examinations
  A. Lumbar puncture (on *all* cases)
  B. X-Ray examination
  C. Gastric lavage
  D. Ophthalmoscopic study
  E. Ear examination
  F. Temperature, pulse, respirations, and blood pressure.

Generally the diagnosis can be made long before this complete examination is finished, but if it is carried out, the cause of even very obscure cases can almost always be found.

PHYSICAL THERAPY IN FRACTURES

By John S. Coulter, M.D., F.A.C.S., Chicago, Ill.

Assoc. Prof. Phys. Ther., Northwestern Univ. Med. Sch.

Doctor Coulter

The basic indications in the treatment of fractures are to increase the blood supply to the injured part and restore the function of the contiguous joints as promptly as possible. The immediate post-reduction period is most important.

At this time, however, physical therapy treatments are hard to apply because of the casts and dressings which are commonly used. For this reason, complete casts should be avoided when this is possible, using instead hinged splints, bivalve casts, and the like, the parts of which can be opened or removed alternately, to permit access to the injured parts. Moreover, complete casts hide the parts, and the case is often overlooked for weeks.

The most important physical agencies in these cases are heat, massage, and exercise.

Heat increases circulation and relieves pain, but the patient must use it as a tool for recovery, not merely as a palliative. The apparatus for its application is simple and flexible, but it must be used under the observation of a *surgeon*, continuing the treatment for an hour, three or four times a day. A good arrangement is several electric light bulbs suspended in an ordinary bed cradle over the injured part. Infrared irradiation may be satisfactorily applied with a common electric bath-room heater having a metal reflector. In the absence of these, compresses or hot-water bags may be used, taking care not to disturb the fracture.

Every modern surgeon knows, or should know, the elements of *massage*, and in the early stages of treatment should give it *himself*. Later it may be given by a technician, *under his direction*. The following types of massage may be employed, and must be used *at least* once or twice a day to be of value.

1.—*Superficial stroking*, which should be slow, gentle, rhythmic, and applied *in one direction*, with the operator's hand relaxed. This can be begun on the second or third day following a fracture, following radiant heat treatment for half an hour.

2.—*Deep stroking*, with the patient recumbent and his muscles relaxed. Heavy pressure is not needed. The strokes should be made in the direction of the blood flow. *Treat the proximal parts first*, or the blood flow may be blocked.

3.—*Kneading* and picking up the superficial tissues with the fingers.

4.—*Friction.*

The simplest form of *exercise* is *muscle setting*, which consists in alternate tensing and relaxing of the muscles, *without moving the joints.*

The injured parts should be mobilized *as early as it is safe* to do so. Do not depend entirely on the x-ray films in making this decision.

Relaxed joint motion, without muscular contraction; *assisted exercise*, under water or by the hands of the surgeon; and *free exercise* are of the utmost helpfulness. In these methods, the weight is taken off the injured limb by means of slings or other contrivances thus making motion easy. †

Electrical stimulation, applied with a galvanic machine directly to the affected muscles, is frequently useful.

Occupational therapy is a definite part of the treatment of fractures by exercise, because the movements involved are *purposeful.*

† Complete details for the construction of simple apparatus of this description can be obtained by writing directly to Dr. Coulter.

FLUID ADMINISTRATION IN CHILDREN

By Joseph C. Jaudon, A.B., M.D.,
St. Louis, Mo.
Instructor in Pediatrics, Wash. Univ. Sch. of Med.

Doctor Jaudon

Sudden loss of water is dangerous to a child, because the accompanying acidosis, even though moderate and of short duration, may produce disastrous results. The newborn or young child may lose 10 percent of its body weight in the first few days or weeks, because of deficient breast milk or other cause; and this loss is not merely water, but also mineral salts and glycogen.

In such cases, give 10-percent dextrose solution and *Ringer's* solution (*not* physiologic salt solution), *mixed in equal parts.* Never give 5-percent dextrose in distilled water alone, nor 10-percent dextrose solution, which is too irritating.

In vomiting from obstruction at the cardia, the loss is water only; if from pyloric or intestinal obstruction, salts and *acid* are also lost, and *alkalosis* results. We must replace the chlorides with *Ringer's* or physiologic salt solution, with 5 percent dextrose; or add sodium lactate to the *Ringer's* solution.

In private practice, before an operation, *test the urine.* If it is acid, concentrated, and contains no chlorides (test with silver nitrate solution), the child is not ready for the operation. With proper treatment, the acidity is reduced and the chlorides increased; then operate.

If the child is *anemic,* give a *transfusion* of whole citrated blood, properly typed (1 cc. of 2½-percent sodium citrate solution to 10 cc. of blood), injecting 20 cc. per kilo of body weight into the *scalp veins* with a small hypodermic needle.

In **severe diarrhea** there is acidosis—the blood CO_2 and bases are low. Give a solution of sodium bicarbonate or *sodium lactate,* in sterile water, *intravenously,* without sterilization. This is readily metabolized and does not upset the gastro-intestinal system.

Lilly's "Molecular Sodium Lactate" ("1/6 molar," diluted five times), given in doses of 60 cc. per kilo of body weight, 1/3 intravenously and 2/3 subcutaneously, relieves acidosis (cyanosis and hyperpnea) in from three to six hours. (If given by mistake, no harm is done). It is best to add 40 cc. of Ringer's solution (total, 100 cc.) for the electrolites. *Then* make a red-cell count and test for low blood proteins and, if necessary, transfuse, but *not until the patient is fully hydrated.*

Repeat the subcutaneous injection of fluids, 40 to 60 cc. every 12 hours. If the diarrhea continues, give a *continuous intravenous infusion* (5 to 10 cc. per kilo per hour) of one-half lactate-Ringer's (Hartman's) solution and one-half 10-percent dextrose solution.

In older children with **diabetic intoxications** (acidosis, ketosis, dehydration, and loss of glycogen), give 2 units of insulin per kilo, *at once,* and then treat the case like one of diarrhea, giving 1/3 of the solution intravenously, 1/3 subcutaneously, and 1/3 *intraperitoneally,* using a 20-gage needle, introduced at one side of the midline. When the acidosis is relieved, give ½ unit of insulin every six hours until the blood and urinary sugar are normal.

If the child is restless, produce sedation with small doses of barbiturates, or even morphine, so that the necessary fluids can be administered easily.

In nephrosis, severe shock, and extensive burns, when no blood is available for transfusion, Baxter's 6-percent solution of acacia may be given, in doses of 1 cc. per kilo, to *hydrated* babies.

IMPETIGO AND RINGWORM

By Cleveland J. White, M.S., M.D.,
Chicago, Ill.
Ass't. Prof. of Dermatology, Northwestern Univ. Med. Sch.

Doctor White

Do not prescribe ointments for babies with *impetigo.* Use a *dry* treatment, such as calamine lotion with 0.5 per cent of mercury bichloride; or 4 grains of copper sulphate and 6 grains of zinc sulphate, dissolved in an ounce of camphor water and painted on the skin from time to time, as indicated. The same measures may be used for adults, if the old reliable ammoniated mercury ointment fails to work.

In all such cases (including those of the follicular type, in adults, where the crusts are small), all crusts must be carefully soaked off with soap and water before applying any medicament whatever.

All nurses, and even members of the staff, who have pustular infections of any kind, should be kept *strictly out of the nursery.*

In *ringworm,* we need *better diagnosis* more urgently than we do new medicines.

"Athlete's foot" is a strictly *human* type of ringworm, which never occurs in animals. We must *keep up the treatment of the reservoirs of infection,* which can almost always be found on the feet (especially the plantar surfaces) and toenails. Eruptions on the *top* of the foot may be contact (*allergic*) dermatitis.

In ringworm, there are almost always deep-seated vesicles at the active margins of the lesions. For a microscopic diagnosis, soak some of the scales from the lesions, for *96 hours,* in sodium hydrate solution, and then examine for the fungi.

Not infrequently we see *general toxic* manifestations, arising from a primary mycotic focus at some distance (generally on the feet). Such patients show symmetrical, itching, usually vesicular lesions on the hands, but no fungi can be found in that locality. In these cases, give some *mild* local treatment (partly as a placebo), and then search for and eradicate the *primary focus.* One must be careful not to confuse the lesions of *psoriasis* with ringworm.

Treatment: In the acute stage of ringworm, look for staphylococcic infection. Potassium permanganate sometimes helps, but frequently not. Remember, we are dealing with the trichophyton, not the epidermophyton.

In the subacute stages, dusting powders, such as from 3 to 6 percent salicylic acid in talcum powder, with 0.5 percent of thymol, are often decidedly helpful.

If the eruption is asymmetric, on the backs of the hands, look for *Monilia albicans* (thrush fungus), and if found, apply the dyes, such as gentian violet.

Tricophytin is not so useful, either for diagnosis or treatment, as it was believed to be at first.

Whitfield's ointment, with or without sulphur or mercury, is as good as anything else in these cases. Good results sometimes follow the application of a paint of 5-percent thymol iodide in alcohol. If the condition does not respond to any of the measures suggested, make a careful search for evidences of *allergic* or *contact dermatitis.*

In ringworm of the *nails* use double or quadruple strength Whitfield's ointment. In the *groin,* apply a *mild* ointment, such as 1-percent ammoniated mercury.

Sore Throats in General Practice

By

R. L. Gorrell, M.D., D.N.B., Clarion, Iowa

IT IS amusing to read many of the articles that appear in our medical literature. One author fills five pages with a discussion of a case of a very rare disease. He has seen only one such patient, may never see another, and must "pad" out his article with abstracts from previous articles (possibly written by some physician who borrowed his material from preceding papers). Another report concerns some disease that can be diagnosed only by the use of very complicated or expensive apparatus (roentgenkymograph, tomograph), in the hands of ten physicians throughout the country, although there are some 130,000 physicians in the United States. A third paper presents in great detail the steps which may be used to diagnose an inevitably fatal pathologic process, such as dissecting aneurysm of the aorta.

I can imagine the patient's relief and joy when he learns that the physician has made such a difficult diagnosis. "That's fine, Doctor! Now that you have gone to such work and have put me to expense to make such an accurate diagnosis, let's get started on the treatment. By the way, what is the treatment?"

In comparison with such rare and exotic conditions, sore throats seem plebeian. The intern and young physician no doubt feel that such a common disease is uninteresting, and do not concern themselves overmuch with diagnosis or treatment. Yet, in these conditions, an accurate diagnostic appraisal may save the patient's life and will certainly enable the physician to furnish prompt relief, which is what the patient is paying him for.

Etiology

I.—*Common causes of sore throat:*

1.—*Contagious diseases:* (a) Scarlet fever; (b) diphtheria; (c) measles; (d) streptococcal pharyngitis.

2.—Catarrhal pharyngitis and tonsillitis, acute and chronic, including quinsy.

3.—*Syphilis.*

4.—*Vincent's angina.*
5.—*Sinusitis* (with dripping of pus over the pharynx).
6.—*Chronically inflamed lymphoid tissue* in the pharynx and at the base of the tongue.

II.—*Rare causes of sore throat:*
1.—Retropharyngeal abscess.
2.—Tuberculosis.
3.—Phlegmonous sore throat.
4.—Neoplasm.
5.—Other acute fevers. (*Typhoid* gives rise to inflammation and ulceration of the throat; superficial ulcers are formed during *variola; measles* always affects the larynx, rarely the pharynx; *scarlet fever* always affects the pharynx, rarely the larynx, whereas *smallpox* affects both equally.)

Here are presented a number of cases illustrating several of these different types of sore throats. The wrong etiologic diagnosis had been made from one to four times by the physicians who examined these patients.

Case Reports

Case 1:—Miss S., age 16, complained of sore throat of three days' duration, which had become progressively more painful; malaise; anorexia; headache; backache; and nausea.

Her previous health had been good, except for measles, pertussis and chickenpox, from which no complications resulted. She had been vaccinated successfully against variola.

Physical examination: Pulse, 104, strong and regular; respirations, 26; temperature, 101° F.; the eyes were not inflamed; the left ear drum appeared normal and the right showed slight reddening over the handle of the malleus; the tongue was covered with a white "fur," through which a few red papillae projected; the pharynx was uniformly inflamed and of a moderately bright-red appearance; the mucous membrane appeared slightly swollen or edematous.

Laboratory examination: No albumin or sugar was found in the urine; the leukocyte count was 11,000. Smears were taken and sent to the laboratory. The previous diagnosis was "an acute upper respiratory infection" with the possibility of scarlet fever to be considered. Fortunately the patient had been instructed to remain in bed.

Subsequent course: The patient complained of pain, which was relieved by applying to the pharynx a mixture of tincture ferric chloride, tincture of iodine, and glycerin, 3 drams (12 cc.) of each.

The smears and cultures showed the typical club-shaped bacillus of diphtheria, and 10,000 units of antitoxin were given at once.

The patient felt weak for two weeks following the cessation of the illness, and her pulse would accelerate to 120 on the least exertion. It was evident that she had suffered an acute myocarditis, caused by the diphtheria bacillus. Sudden death has been known to occur during the course of this acute degenerative process, when the patient sat up suddenly.

Comment: The mother stated that she had noticed a peculiar odor in the patient's room. The older generation of physicians who had the advantages of seeing more contagious-disease patients, in poorly ventilated homes, could quite frequently make a diagnosis by noting the odor in a sick-room.

Case 2:—Miss C., age 17, had complained of sore throat for three days, but showed no malaise, cough, nor noticeable fever. As this patient became ill only two days after patient number 1, and as they were classmates in high school, the inference seemed obvious.

Physical examination:—Pulse, 80; temperature, 99.6° F., eyes, nose, and ears showed no abnormalities. The posterior pharyngeal wall was covered with white, membranous patches. Each patch was surrounded by a brilliant red areola, was difficult to remove, and left a bleeding surface after removal.

Laboratory examination:—The urine contained no sugar or albumin; hemoglobin, 80 percent; red cells 3,750,000; white blood count 7,000.

Smears and cultures failed to reveal the diphtheria bacillus, thus sustaining the clinical impression of *Vincent's angina.* Fusiform bacilli were found on smears. Applications of gentian violet and arsphenamine resulted in rapid disappearance of the lesions.

This girl might very well have received a large, expensive dose of diphtheria antitoxin, with its possibilities of anaphylactic shock and serum sickness, if one's clinical judgment had been swayed by the immediately preceding case.

Case 3:—Mrs. J., age 49, a housewife complained of sore throat for one month. This woman had had a persistent infection of the right maxillary sinus, which I had been treating by Proetz's method. As at first nothing was to be seen other than a definite inflammation of the lateral margins of the pharynx, I did not pursue the matter further.

After the sinusitis was relieved, the pain in the pharynx persisted unabated, despite repeated applications of silver nitrate, the iodine-iron chloride-glycerin compound, and sprays of mild antiseptics. A Wassermann test was reported as negative. Repeated urinalyses showed no sugar, albumin, nor pus. The hemoglobin varied between 75 and 85 percent; erythrocytes averaged about 3,500,000; the leukocytes ranged from 4,000 to 7,000. Throat smears were reported negative for streptococci, diphtheria bacilli, and the fusiform bacilli and spirochetes of Vincent.

A few filmy white patches, which peeled off easily, were noted on the anterior and posterior pillars. At this time, some six

weeks after the onset, a *pure culture of yeast* was obtained.

Lugol's solution was prescribed, in five-minim (0.352 cc.) doses, which were increased one drop daily. Gentian violet solution was applied to the pharynx at two-day intervals. The pain disappeared in four days, and the pharyngitis in a week.

Case 4:—Mr. J., a farmer, age 38, had had a severe sore throat for ten hours. He had felt perfectly well until some time during the night, when he awoke with a sore throat. He complained of being "hot" and restless. The patient was red-faced, and appeared prostrated.

Physical examination: Pulse, 118; temperature, 102.4° F.; respirations, 28. The mucous membranes of the nose and throat were bright red in color, and there was some watery discharge from the nose. The right anterior and posterior pillars were swollen and the right tonsil projected somewhat toward the median line. Because of his obvious weakness, he was not subjected to any further physical examination.

Laboratory examination: The urine contained no albumin nor sugar. Smears from the throat revealed no bacteria of any type.

Diagnosis: Early peritonsillar abscess (quinsy) seemed the obvious diagnosis, and the throat was sprayed with alkaline antiseptic solution and painted with 1 percent silver nitrate solution. Some relief was obtained by the constant use of benzocaine-calcium iodide lozenges and the application of ice packs to the throat.

Course: When seen 24 hours later, the pain in the throat was still severe, and the appearance of the pharynx was unchanged. When the patient removed his shirt, he exposed a beautiful erythema of his entire upper trunk. Upon this erythematous base were hundreds of fine vesicles (a rare type of *scarlet fever rash*). Injection of Dick's scarlet fever antitoxin resulted in a rapid fading of the rash, and relief of the fever and pharyngitis.

Case 5:—Master W., age 11, complained of sore throat and malaise. This husky boy had noticed a slight pain in the throat during the previous night, and did not feel like getting up in the morning. The only significant findings were: temperature, 99.9° F.; a thin, watery discharge from the nose; uniform redness of the pharynx. No albumin nor sugar was found in the urine. No organisms were found in the throat smears.

Course: The pain in throat persisted for four days, but was somewhat relieved by spraying the throat with mild antiseptics and the nose with ephedrine in saline solution. On the fourth day, the boy's eyelids appeared puffy, and his face was diffusely swollen.

At this time, his conjunctivae were inflamed, and close examination of the skin revealed a few blotchy red areas. A typical *measles* exanthem developed within 24 hours.

Case 6 concerns the theatre janitor of 48 years, who had visited four physicians in a vain attempt to find relief for a very persistent, painful pharyngitis. After three months of treatment, which included the use of many antiseptics, the removal of teeth, ultraviolet and infrared ray treatments, the condition remained unchanged.

Physical examination revealed only a pharynx which was dusky red, close inspection showed that the redness was patchy, and a very small, thin, grey pellicle or membrane was present.

Laboratory examinations: The Wassermann test was positive (three plus).

Within one hour after his first injection of neoarsphenamine, the pain in his throat disappeared, and did not return.

Case 7 relates the sad tale of the boy of seven, who was lightheartedly diagnosed as suffering from a "cold and bronchitis." He complained of malaise and feverishness, in addition to a mild pharyngitis. His temperature was 99.5° F.; there was a little redness of the cheeks and a definite coryza. The throat was slightly reddened. A few coarse râles were heard over the chest. Within 24 hours, he felt perfectly well.

His older brother developed *scarlet fever* in 48 hours and suffered a severe attack, with complicating otitis media which necessitated paracentesis.

Case 8:—Mrs. D., a farm housewife of 62 years, had had recurrent attacks of "tonsillitis" (i.e., pain and soreness in the throat). On close questioning, she remembered that the vigorous rubbing-in of a liniment would relieve the throat pain.

Examination revealed large, slightly-reddened tonsils with prominent crypts. There was a definitely tender area in the lateral neck muscles. Infrared rays were applied to the cervical muscles and menthol-methyl salicylate-chloral hydrate ointment was prescribed for local application. Relief was immediate, and yet nothing was applied to the throat or tonsils.

Case 9:—Mrs. L., age 26, housewife, complained of persistent, mild sore throat over a period of several weeks, which was worse on arising. There was slight dysphagia. An otolaryngologist, who had examined her mouth and throat, reported that he could find no cause for the pain.

The tongue, pillars, and pharynx appeared normal. The tonsils had been removed. A detailed scrutiny was made of each lateral margin of the tongue. Far back on the right margin, at the junction of the tongue with the anterior pillar, a *small ulcer* was found, which could be exposed only by vigorously pushing the tongue to the left with a tongue depressor.

An application of 5 percent silver nitrate solution resulted in prompt disappearance of the pain. There was no recurrence in 2 years.

Case 10:—A mechanic, age 44, complained of recurrent sore throat, with cough and expectoration of thick, purulent sputum. Naturally enough, he was worried as to the possibility of tuberculosis because of the coughing up of material.

Physical examination: The turbinates were slightly reddened; there was slight

reddening of the pharynx and a large amount of yellow discharge on the posterior pharyngeal wall.

The examination of the lungs showed nothing abnormal; the tuberculin test was negative. Transillumination indicated a right *frontal sinus infection*, and suction to the nose withdrew several teaspoonfuls of purulent material.

The post-nasal drip is the most neglected symptom in clinical medicine. *A headache*, as a result of sinusitis, does not occur unless the drainage from an infected sinus is blocked, completely or partially. Sinusitis may be present for years without the patient being aware of it. The physician may also be misled if there is no complaint of headache.

Case 11:—Mrs. C., age 53, housewife, complained of sore throat with burning, hoarseness, and dysphagia, which has appeared intermittently over a period of ten years. At times she would feel as if she could not breathe. She believed that there were "tumors" in her neck (she felt the ends of the hyoid bone). She had suffered a severe tonsillitis ten years previously, and her tonsils had been removed one year ago, without relieving the throat symptoms.

Examination: Lymphoid masses were seen over the posterior pharyngeal wall. The posterior pillars were inflamed. More lymphoid hyperplasia, at the base of the tongue, was disclosed by using the laryngeal mirror. Tenderness was noted at the attachment to the occipital of the trapezius. There were no other significant findings.

Dr. Kirch, otolaryngologist, confirmed the diagnosis of chronic inflammation of the oral lymphoid tissue. The local application of iodine and the oral administration of two Lipiodine tablets (Ciba) daily, have partially relieved her soreness. As she is both introspective and inclined to worry about herself, it is feared that any treatment will fail to cure.

A severe pharyngitis should be considered an indication for the making of a leukocyte count, to rule out *agranulocytic angina*. If leukopenia is discovered, treatment should be started at once. Liver extract and Pentnucleotide are given by injection. A blood transfusion should be administered.

If we performed differential white blood cell counts more frequently, we might find that we have been overlooking many cases of *mononucleosis (glandular fever)*, the predominating symptom of which may be sore throat or fever. The enlarged lymph nodes (cervical, axillary, inguinal) are present in the great majority of cases. A lymphocytosis is consistently found.

No mention has been made of chronic follicular pharyngitis, as the diagnosis is evident as soon as the lymphoid patches are seen on the pharyngeal wall.

Treatment

Specific treatments for sore throat include the use of diphtheria antitoxin; injections of whole immune blood or placental extract, for measles; convalescent serum or Dick's antitoxin for scarlet fever; and sinusitis therapy (nasal sprays and suction; Proetz's method of displacement; home use of a Benzedrine inhaler).

Iodine should be given by mouth if pharyngitis is persistent or if lymphoid hyperplasia is present at the base of the tongue or on the posterior pharyngeal wall. The lymphoid masses may be shrunk down by the application of the iodine-glycerin-ferric chloride solution. After a preliminary application of Nupercaine or cocaine, the larger masses may be destroyed by the cautery. A recent article suggests that the latter procedure is necessary to remove this focus of infection.

Gargles are of value because they keep the patient and his family busy. They usually do no harm unless taken too frequently.

A teaspoonful of sodium bicarbonate and of sodium chloride, dissolved in a glass of hot water, alleviates some soreness. Hot solutions made with alkaline antiseptic tablets (commercial) are nicely flavored.

Lozenges. The familiar benzocaine-licorice lozenge, Aspergum, Sucrets (contain Hexylresorcinol), and the new antiseptic and analgesic lozenge ("O-R 95") relieve pain because the drug is carried against the tonsils, pillars, and pharyngeal walls as it is swallowed.

Sulfanilamide is left to the last, as it should properly be. I fear that the ill effects of this drug will prove a boomerang to those misguided individuals who are buying from 1,000 to 5,000 tablets at a time. When one practitioner sees three cases of sulfanilamide poisoning within a month, it can only mean that hundreds of patients are taking a potent drug and suffering some ill effects from it.

When used in treatment of a true streptococcal pharyngitis (the diagnosis being made either by the red, edematous soft palate and pharynx or by the smear), sulfanilamide is a valuable remedy. The pain disappears after 20 or 30 grains have been taken, and the patient feels stronger. It is noteworthy that a patient may present himself for a check-up some forty-eight hours later and have no symptoms, yet the throat may appear just as inflamed as when he was first seen.

Personally, I would not take more than 40 or 50 grains daily, except in the event of a severe infection, and do not prescribe larger doses. It must be remembered that the drug will cause fever, and therefore that the persistence of pyrexia is not necessarily an indication for increasing the dose.

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The Treatment of Chronic Functional Constipation

By

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Constipation as defined by Stedman is "a condition in which the evacuations of the bowels are infrequent or incomplete, more or less fecal matter being retained in the intestine." Clinically, the difficulty of deciding upon the degree of constipation depends upon the variation in bowel habits that may be present in different individuals, and still be compatible with good health. This variation depends in a great measure upon the diet taken by the individual, both quantitatively and qualitatively. When only a small amount of bulky food is taken during the day, there is necessarily less residue left in the colon and it may be several days before there is sufficient accumulation to cause a bowel movement. In other instances, where the diet is adequate but is composed of foods that normally leave little residue—fruits taken as fruit juices, proteins taken as lean meats or eggs, and carbohydrates in the form of almost pure starches or sugars—there is so little bulk remaining after the normal process of digestion that bowel movements occur only at intervals of several days. This last fact is made use of clinically when it is desired to rest the colon.

Habit is another factor in determining the frequency of bowel movements. In man the colon is essentially a storage reservoir, and while, in some of the more primitive races, habit allows a bowel movement after every meal, people of our usual working habits, and on our conventional diet, have decided that one bowel movement daily is adequate and so have become accustomed to this regimen. The generally accepted opinion among the laity, that one should have one bowel movement each day, is one that is usually shared by the physician, who makes the mental reservation that a wide degree of variation from the conventional standard is still compatible with good health. We may take as our standard, therefore, that normal bowel habit is the evacuation of the bowels once every day.

Classification of Cases

The portion of the gastro-intestinal tract that is chiefly concerned with the process of defecation is the colon, and particularly the distal colon and rectum. The patient with a colostomy is a perfect example of what occurs when this portion of the distal bowel is not functioning. These patients are seldom constipated, and it is necessary to regulate their diet and occasionally administer constipating medicines to prevent their having bowel movements more often than once a day. These patients may become constipated if there is a narrowing of the stoma by scar tissue. In a similar fashion, constricting lesions in the colon can produce a type of *mechanical constipation*. This may occur both from within or without the bowel and may occur anywhere along the course of the colon. These cases are not so numerous as cases of functional constipation, but the gravity of the obstructing lesion makes it more important that they be recognized very early and that proper surgical treatment be instituted.

It is the first duty of a physician, when called upon to treat a case of constipation, to ask himself, "Is this a case of mechanical partial obstruction?" and particularly, "Has this patient a carcinoma of the rectum or colon?" Digital examination of the rectum, followed by a proctosigmoidoscopic examination of the lower bowel, and later the study of the colon by a barium enema, will enable these questions to be answered satisfactorily.

There is a second group of cases in which constipation is *secondary to an associated abdominal pathologic condition*. It is necessary to recognize chronic gallbladder disease, subacute or chronic appendicitis, or chronic pelvic inflammatory disease, to determine the causative factor in these cases. This can be done by a more thorough history, a more detailed physical examination, and more careful x-ray examinations of the upper gastro-intestinal tract and its derivatives. The secondary constipation in these patients is not to be treated until the causative factors are corrected by adequate surgical or medical means.

Having ruled out the obstructive lesions of the colon and diseases in other intra-abdominal organs, there is another group of cases in which the constipation is due to *general systemic disease*, and which must be recognized. The patient with hypothyroidism and atony of the colon; with anemia or vitamin B deficiency, should be recognized, and the basic condition treated. The management of the constipation will be a secondary factor.

Patients with *painful lesions of the anus* or perirectal tissues can be easily recognized at the time that the rectal palpation and inspection is made, to rule out cancer of

the rectum and rectosigmoid. These are the persons that develop constipation voluntarily, because the pain caused by defecation is feared. This is considered reason enough to try self-administered measures to keep the stools soft or liquid, and to avoid going to stool for as long a time as possible. An anal ulcer or prolapsing hemorrhoids can cause constipation just as easily as obstructive lesions higher in the bowel.

Having eliminated four groups of patients: (1) those with mechanical obstructive lesions in the distal colon or rectum; (2) those with constipation secondary to abdominal lesions not directly involving the distal gastro-intestinal tract; (3) those having other systemic diseases; and (4) those with painful anorectal conditions, there remains that group of patients that we may speak of as having a functional type of constipation. In this group fall those persons that have some anatomic or physiologic disturbances of the normal process of defecation. These by far outnumber the other cases caused by definite pathologic conditions. It includes the patients who have a history of constipation persisting for years, often with little gross evidence of bodily damage caused by the prolonged retention of feces. It is necessary to stress again that this group includes all those cases in which there are no more serious causes for the intestinal dysfunction. It is a greater mistake to miss the diagnosis of one early carcinoma of the rectosigmoid than it is to allow any patient in the functional group to continue his constipation for another ten years, for much more actual harm will be done.

Mechanism of Defecation

A brief review of the normal process of defecation will allow us to decide upon the causes of the improper functioning of any part of the process.

Food residue is not ready for evacuation from the body until it has reached the distal half of the colon. Here it normally collects and is moved along by "mass movement" peristalsis. This occurs only a few times in 24 hours, and is initiated by the gastrocolic reflex. The mass movement forces the contents of the descending colon and sigmoid into the rectum. The rectum is normally empty, and the presence of bulky or irritating material in the rectal ampulla stimulates the sensory endings in the rectal mucosa and the bowel wall, and causes the sensation that brings about the desire for defecation. When this occurs there is a feeling of discomfort until the process can be completed. Completion involves the expulsion of the contents of the rectum by the aid of the abdominal pressmechanism, which consists, first, in the fixation of the diaphragm by the closure of the glottis and holding the breath, then contraction of the abdominal muscles. This may be aided by the pressure on the abdomen of the flexed thighs or of the flexed forearms. The muscles of the pelvic outlet are also contracted to furnish counterpressure, and the rectal contents are forced against the anal orifice. Following the completion of the act there is an end to the disagreeable sensations that were present at the beginning, and a normal feeling of satisfaction occurs.

The gastrocolic reflex is normally most active in the morning, following a good night's rest. The ingestion of sufficient food to distend the stomach will stimulate the reflex that causes a peristaltic wave—usually a mass movement—of the colon. This empties the distal colon into the rectum. A poor night's rest, a breakfast of very small quantity, the refusal to wait a sufficient time for the reflex to act, and the absence of associated stimuli that, in time, will serve to "condition" the reflex, can all be causes of chronic constipation. On the other hand, after arising refreshed and rested after a good night's sleep, the taking of a leisurely breakfast, which is sufficient in amount to comfortably fill the stomach; a brief delay in the familiar location, with the usual morning sights and sounds or the afterbreakfast smoke; as well as going to the toilet at the same time every morning, will promote a satisfactory gastrocolic reflex.

The normal threshold level of the rectal stimulation is low. The presence of a small amount of feces in the ampulla is enough to initiate the desire to go to stool. Normally the propulsion of even a small amount of the bowel content into the rectum will be an adequate stimulus. However, the continued disregard of this stimulus will be sufficient to raise the threshold, and after a shorter or longer period the stimulus will not reach consciousness. The patient then will have no desire to go to stool, even though the rectum becomes filled with feces. The diagnosis of this condition is made by finding the rectum full of feces, although the patient has no desire to defecate. When this stage is reached, he usually resorts to the use of laxatives and, if they are the type that produce increased bulk in the stools, the stimulus will again be effective.

If, on the other hand, the laxative is of the type that will produce a soft or watery stool, this will not distend the rectum enough to give an adequate stimulus and reliance must be placed in the continued use of more drastic laxatives of a similar type. Soon the rectal stimulus will fail to

function, and the prolonged use of the irritating laxative will produce a chronic inflammatory change in the rectal mucosa, which will still further raise the threshold. It is necessary always to have the patient become conscious of the rectal stimulus and respond at the slightest desire to go to stool, and to avoid the use of drastic laxatives until the threshold is returned to the normal level.

The abdominal pressmechanism necessary to complete the normal defecation can be weakened, if there is a weakness of the muscles concerned. If the patient can not hold his breath for a short time, as in some cardiac or asthmatic conditions, the diaphragm cannot be fixed. An eventration of the diaphragm will not allow sufficient pressure to be maintained.

Weakness of the abdominal muscles, such as follows pregnancy with thinning or separation of the muscles, the presence of some abdominal tumor, or generalized muscle weakness will produce constipation. This must be corrected if the constipation is to be cured. In a similar fashion, if there is a laceration or weakness of the perineum, there cannot be adequate counterpressure on the abdominal contents. Women who have had a laceration at delivery are, again, the ones most commonly affected, but the presence of rectal prolapse, in an elderly patient, will produce the same condition.

The efficiency of the pelvic floor can be easily determined by having the patient strain, as though having a bowel movement, and watching the perineum to see if there is an abnormal bulging of the levators. Weakness of the abdominal muscles can usually be corrected by exercises, but if there is a perineal laceration or a rectal prolapse, repair of the pelvic floor is necessary if the normal process of defecation is to be restored.

Relaxation of the sphincters occasionally fails to occur in these cases, usually because there is some painful lesion of the anal canal, which causes the patient to refuse to relax through fear of the pain, or which has lasted so long that there is a secondary spasm or fibrosis, with consequent narrowing of the anal canal. If such a condition is present, a digital and visual examination of this region will reveal the cause, and appropriate surgical measures can then be taken to correct it. Anal ulcers will usually have to be excised, pecten bands divided, and a thorough manual dilatation of the anal canal performed, under anesthesia.

Any of the causes of chronic functional constipation just described may be present in any one case, and the correction of one defect or improper habit may overcome the condition. But in most cases seen in practice, especially where the condition has persisted over a period of years and has been disregarded or improperly treated by the patient or his physician, it will be found most satisfactory to call upon all the possible ways of bringing about the normal process of defecation. Not one medicine, or exercise, or diet should be employed, but the patient should be managed so that all the available aids are used. Frequently the patient will say that he has, at one time or another, tried all the suggested measures, and probably dozens more, and has had no results. He should be made to understand that what is desired is the adoption of a new regimen of living, and that this should be faithfully continued and properly supervised, at frequent intervals, until the condition is corrected. This will require careful management by the physician and faithful adherence to the rules of the game by the patient.

Before commencing treatment the physician must take a careful history and make an adequate physical examination, being especially careful to examine the abdominal organs, the abdominal walls, and the pelvic outlet thoroughly, and to make a careful rectal and proctoscopic examination. If there is the slightest indication for it, an x-ray study should be made, following a barium enema. Any further studies that seem necessary are then completed.

After this has been done, the physician must be able to answer, to his own satisfaction, the following questions: Has this patient a cancer of the colon or rectum? Has this patient any obstructive lesion of the lower gastro-intestinal tract, either within or without the colon? Has this patient any other intra-abdominal lesion that might cause the constipation? Has this patient adequate abdominal and pelvic muscles? Has this patient any disease of the anal canal or rectum? If all these questions can be answered in the negative, and if the rectum is dilated or repeatedly contains feces between bowel movements, the case is considered one of functional chronic constipation.

Treatment

Treatment of these patients should be individualized, if it is to be successful in all cases. The most satisfactory treatment routine involves the supervision of the mode of life, the diet, and the judicious use of drugs or physical therapy.

The following outline for the treatment of these cases can be adopted for the routine care of patients, if seasoned with a moderate amount of common sense. One should not prescribe a diet rich in fats or carbohydrates for the obese female, nor should one limit the diet of the undernourished

patient to salads and cooked vegetables, just to supply bulk for the bowel. The man who works for a living at hard manual labor should not be advised to take setting-up exercises or a long walk before breakfast. Rest is for the overworked, and exercise for the sedentary office worker. The following routine treatment can be ordered for the patient:—

1.—Arise one-half hour earlier than usual.

2.—Drink a glass of warm or hot water.

3.—Spend 10 or 15 minutes doing calisthenics that will exercise the muscles of the abdomen and chest. (A brisk walk may be substituted).

4.—Eat a breakfast that is sufficiently bulky to distend the stomach moderately. Most modern breakfasts are too scanty and eaten too hurriedly. Include fresh or stewed fruits. The undernourished patient should take cream and butter with the meal.

5.—Allow enough time to read the morning paper or smoke before leaving for work. When the desire to go to stool occurs answer it promptly. If it does not occur after the morning meal, instill two or three ounces of olive oil into the rectum at bedtime, and retain it through the night.

6.—Take a lunch and dinner with fresh salads or cooked vegetables or fruits. See that the diet includes enough mineral salts and vitamins.

7.—Go to bed one-half to one hour earlier, to compensate for the earlier hour of arising.

8.—If a small amount of some mineral oil emulsion is to be taken or oil is to be instilled into the rectum, this is done at bedtime.

9.—So live during the day that there is no constant worry or mental strain or excessive physical fatigue. This means the avoidance of excessive and spasmodic sports and trying social engagements.

Start the patient on a powder containing a mild sedative and antispasmodic, and kaolin. The first time this prescription is given it may include a small amount of magnesium oxide, but this is to be omitted when it is subsequently refilled.

The following is satisfactory:

℞ Sodium phenobarbital—gr. ¼ to ½ (16 to 32 mg.)
Extract belladonna leaves—gr. ¼ (16 mg.)
Magnesium oxide, heavy—gr. 5 to 10 (325 to 650 mg.)
Kaolin q. s.—dram. 2 (8.0 Gm.)
Disp. tales doses No.—24.
Sig: Two teaspoonfuls mixed, with water, after meals.

The magnesium oxide may be omitted first, then the belladona, and last the phenobarbital. By this time, normal bowel function should be established.

It should be remembered that this powder is a "crutch" that should be used only until such time as the patient learns to walk alone, and then should be discarded. The supervision of the daily routine, the establishing of a conditioned gastrocolic reflex, the lowering of the rectal threshold, and the breaking of faulty habits constitute the chief part of the routine. If reliance is placed on medicine, the method will fail. The patient should be told, at the outset of treatment, that he should be prepared to give a year to the establishment of correct habits.

Summary

The treatment of chronic functional constipation consists, first, in the proper diagnosis of this condition. Once this has been established the treatment should consist of a regimen of living, exercise, diet, and the re-establishment of normal gastrocolic reflex and a normal rectal sensory threshold. The regimen can be applied routinely to all cases where the condition is functional, and the patient should be supervised until such time as he can continue alone.

55 East Washington Street.

JUNK IT!

Junk something every day. Junk your worries, junk your fears, junk your anxieties, junk your little jealousies, envies and hatreds. Whatever interferes with your getting up and getting on in the world—junk it! Every night before you go to sleep, put in the junk heap all your disappointments, all your grudges, your revengeful feelings, your malice —junk everything that is hindering you from being a strong, fine character. The great trouble with most of us is that we haven't any junk heap of this sort. We pull all our mental enemies, all our handicaps, our discouragements, our losses, our misfortunes, our troubles, worries and trials, along with us. That eats up more than 50 percent of our vitality and energy, so that we have only the smaller amount left for the great achievement of making life a success.—Let's Go.

Physical and Office Therapy and Radiology

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Painless Hypodermic Injections

THE fear of hypodermic injections prevents many patients from enjoying the benefits of such parenteral therapy. The pain connected with the injection is partly psychic and partly physical. By carrying out the following technic, both of these etiologic factors can be materially affected:

1.—Do not let the patient witness the actual process of filling the syringe, attaching the needle, et cetera.

2.—Tell the child, "It will hurt for just a second," or that "It will feel like a pin prick." Children do not forget the physician who has hurt them when he promised not to do so.

3.—Use the finest possible needle for the purpose—a 24- or 25-gage needle, ½ to ¾ inch in length, for watery solutions, and a 22- or 23-gage needle for oily solutions. Preserve the sharpness of the point by carefulness in handling (do not let needle point come in contact with the side of the pan that is used in boiling; always keep a stylet in the needle). The patient who has been hurt by the introduction of a bent or "hooked" needle will remember the event all too vividly.

4.—The needle should be pushed into the skin as fast as possible, as the only sensitive area is in the skin itself. The skin may be stretched taut or pinched up between the fingers. If the needle is introduced at right angles to the skin surface, the possibility of bending or breaking the needle is reduced to a minimum. Apropos the latter subject, it may be remarked that a needle of good quality, which is not rusty, will not break when used properly. If there is any doubt as to the strength of a needle (and this point is of especial value in regard to spinal puncture needles, where the breaking of a needle calls for a surgical procedure of some magnitude), remove the stylet and bend the needle from side to side; a weak needle will break or give way.

5.—The needle should be withdrawn at the same angle at which it was introduced, thus avoiding painful pressure on the skin.

6.—Novocain or procaine solution, 1 percent, may be combined with many medications (liver extract, aminophyllin, iron cacodylate) which are painful when injected into the subcutaneous tissues. Usually, one cubic centimeter of the local anesthetic is sufficient.

7.—As injections into the muscles are usually less painful than those given hypodermically, it is well to administer all irritating solutions deep into the gluteal muscles. The syringe should be held like a fountain pen and plunged into the skin (which is held taut between the outspread fingers of the other hand) in the fashion of a harpoon. It has been found that a large amount of solution (blood, saline solution) may be injected into the thighs of babies, thus avoiding the contamination which may result from the constant rubbing of the urine and feces-soaked diaper on the needle holes.

R. L. GORRELL, M. D.

Clarion, Ia.

★ Notes and Abstracts ★

Electrothermic Methods in Rectal Diseases*

ELECTROTHERMIC METHODS have these advantages: Minimum loss of blood; practicability as an office method; freedom from such complications as ulcers, abscesses, strictures, fissures, or loss of sphincter control; absence of recurrences; short and comfortable convalescence. The *monopolar current must be used.*

Hemorrhoids: A mild cathartic is given on the night before operation. If there is chronic constipation, a sodium bicarbonate enema is administered at least 2 hours before the operation. If there has been a normal, regular bowel movement on the morning of the operation, no enema is given, as there is then less likelihood of soiling the operative field. An hour before the operation, the patient is given a barbiturate. This is routine treatment, as a prophylaxis against procaine toxicity.

Caudal anesthesia is usually employed (30 cc. of 2-percent procaine solution injected in to the caudal hiatus). It is superior to local injection because: (1) one needle prick only is necessary; (2) the operative field is not distorted; (3) the sphincter ani muscle is not injured; (4) it may be used in spite of edema, thrombosis, ulceration, or prolapse, without danger of infection. Successful anesthesia produces a completely relaxed sphincter, which does not contract when irritated and is easily divulsed by separating the index and middle fingers.

A good diathermy machine, capable of delivering a steady spark at least ¼ inch in length, using the monopolar current, is all that is necessary in addition to the usual instrument set-up.

With an Allis clamp, the largest external mass is grasped above the mucocutaneous junction and pulled away radially from the center of the anal opening. An internal hemorrhoid is usually found above the external hemorrhoid and an Allis clamp applied. If the entire internal mass has not been drawn out of the anal canal, a third or even a fourth Allis clamp may have to be applied in the same radial plane.

A hemorrhoid-crushing clamp is now applied beneath the Allis clamps, which should have been applied gently and firmly, lest fibers of the sphincter be caught in the crushing clamp. A strip of sterile gauze is placed around the clamp posteriorly, separating the clamp from the underlying anus and adjacent skin. The needle electrode is applied to the mass, the current turned on, and the entire outer surface of the mass is sprayed with monopolar sparks until it becomes gray. The needle is plunged into the mass at regular intervals, thereby desiccating the mass in a methodical manner.

When the hemorrhoidal mass is dry, gray, and shrunken, it is cut off flush with the clamp by scissors or, preferably, with the cutting current. The stump is treated thoroughly with the monopolar spark until almost charred, then the clamp released, one notch at a time. Opening the clamp slowly enables the operator to treat any bleeding by desiccation. The stump is then released and other hemorrhoidal masses removed in the same manner.

A small strip of iodoform gauze, liberally impregnated with carbolated petrolatum, is inserted in the rectum, and sewed to the gauze squares now applied.

The only postoperative complaint is of burning, which may occur shortly after the operation, and is relieved by a *moderately* hot water bag or pad, or by morphine. If an oil-soluble anesthetic (Anucaine) is injected into the sphincters posteriorly (5 cc., at about the 4 and 8 o'clock locations), pain and sphincter spasm following bowel movements will be eliminated for many hours or days. The patient is kept in bed 2 days, but allowed to go to the bathroom, and is allowed to return to work in from four to seven days.

Anal Fissure: The area around the fissure is infiltrated with 2-percent procaine solution or an oil-soluble anesthetic; the sphincter dilated, a spreading speculum inserted and the blades opened.

Using the monopolar current, the entire base and edges of the fissure are thoroughly desiccated. Ordinarily a 1/8 inch spark is sufficient for the purpose of producing a dry coagulum. A strip of iodoform gauze, impregnated with carbolated petrolatum, is inserted.

On the following day, a warm olive oil-glycerine enema will initiate a bowel movement. The average time in bed is 24 hours. If hemorrhoids are present, they are treated as above.

Abscesses: Abscesses should be incised as soon as they can be localized, without waiting for fluctuation, and preferably with the cutting current. Adequate drainage must be maintained until the accumulated pus has been evacuated, and healing from the bottom encouraged to prevent recurrence.

* *Am. J. Surg.*, Sept., 1938.

Fistula-in-ano: Caudal anesthesia is used, and the fistula is laid open as it is traced, with the cutting current. The resulting fissure is destroyed by electrodesiccation. The wound is packed wide open with iodoform gauze.

Polyps: Polyps and other benign growths may be grasped with an Allis clamp and their pedicles desiccated, after which they are cut off with the cutting current or scissors.

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New York City.

Diathermy in Coronary Thrombosis

GRATIFYING RESULTS have been obtained by treating a series of cases of coronary thrombosis with diathermy. Attacks of pain were relieved, even during an anginal attack. Dyspnea disappeared or was less marked. Several patients were returned to a fairly active life, after being hopelessly invalided. Extra-systoles would disappear for some hours, and, after a series of treatments, either disappeared entirely or were much less frequent.—W. W. BLACKMAN, M.D., in *Arch. Phys. Ther.*, Aug., 1938.

Psychologic Aspects of Physical Therapy*

THE ETHICAL PHYSICIAN has always considered it quackery to use suggestion in the treatment of patients, yet the element of suggestion plays a large part in the cure of any illness. There is always a mental component in any organic illness, which is often entirely unrecognized by the patient or the physician.

An individual feels that he is not receiving the love, care, or sympathy that he is entitled to, and his unconscious defense mechanism protects him by the development of some illness, or an organic illness is intensified and rendered incurable by this unrecognized factor.

If a man is unconsciously seeking certain satisfactions and is unable to find them in his every day environment, he may fall ill. The illness brings him attention and other rewards that he could not obtain otherwise, and *he accepts the disease as a substitute. If the physician treats the disease without reference to the psychologic needs of his patient, he may meet passive indifference or even active opposition on the part of the patient.* The physician is reluctantly compelled to realize that the foe is not an invader, but may be something within the patient. He is reminded of the comparative ease with which some people fall ill, the repetitiousness of their afflictions, and the persistence with which they cling to their illnesses.

If the physician ministers to the psychologic needs of the patient, the patient himself often finds the cure. Physical therapy is of mental, as well as physical benefit.

Stomach trouble, backaches, menstrual disorders, headaches, and a host of other physical complaints may represent the unconscious desire for attention, for love. Personal attention given by the therapist, and often the actual physical contact (as in massage), is of extreme importance.

A second need often expressed by the patient is for "building up." A course of physical therapy increases his self-esteem and confidence. Rarely does the patient's physical condition demand physical procedures, yet a course of massage, various types of sprays and salt glows, and generalized ultraviolet ray treatments, give him a sense of wellbeing that persists long after the physiologic benefits subside.

A third unconscious need is the desire of punishment. We are all familiar with the patient who prefers unpleasant treatments, bitter medicine, operations, and who demands painful remedies. These patients have an unconscious feeling of guilt, which is appeased by punishment. When the sense of guilt is assuaged by vigorous treatment, some if not all of the symptoms subside. Continuous packs, neutral baths, and rough massage are interpreted by the patient as being punishment.

WILLIAM C. MENNINGER, M.D.
BYRON L. SHIFFLET, M.D.
Topeka, Kansas.

*Arch. Phys. Ther., Sept., 1938.

Hyperpyrexia in Complications of Gonorrhea

IN OUR EXPERIENCE, severe complications of gonorrhea (90 cases of arthritis and salpingitis) responded better to hyperpyrexia than to any other method of treatment. The Kettering Hypertherm was used.

This form of treatment is not without danger, and only those severe and disabling complications of gonorrhea, not readily amenable to other forms of therapy, should be so treated.—DRS. T. J. BAUER and H. L. CECIL, U. S. Pub. Health Service, in *Ven. Dis. Inform.*, Aug., 1938.

★ Books ★

Roentgen Diagnosis

RIGLER

OUTLINE OF ROENTGEN DIAGNOSIS. *By* Leo G. Rigler, B.S., M.B., M.D., *Professor of Radiology, University of Minnesota, Minneapolis, Minnesota. Atlas Edition. 254 Illustrations, and Original Drawings by Jean E. Hirsch. Philadelphia, London, Montreal and New York: J. B. Lippincott Company. Price, $6.50.*

FIVE or six times a year, the medical book reviewer finds a text that really fills a need. Dr. Rigler has worked up a brief, outlined presentation of diagnosis with the roentgen or "x" rays, supplemented by well selected roentgenograms and illustrative sketches, that can be of great value to every person in the practice of medicine.

The volume makes no attempt to include the technic and physics of roentgenology, nor rare uses of the roentgen rays. Discussions are given on the general aspects of diagnostic roentgenology; then bones and joints, spine and spinal cord, skull and its contents, lungs and bronchial tubes, heart, thoracic cavity (pleura, diaphragm, mediastinum), gastro-intestinal tract, gallbladder, abdomen, urinary tract, female generative organs, and miscellaneous subjects are considered.

What makes this book so valuable is its practicality. Disease conditions are presented briefly under their respective system headings and the value of the x-rays indicated, and illustrated by clear roentgenograms and drawings. For example, under the heading of pneumonia, the important things to be observed in a roentgenogram diagnostic of lobar pneumonia are listed. "In the great majority of cases of lobar pneumonia, roentgen findings will be diagnostic in from 18 to 21 hours after onset and before conclusive physical signs are present. There is usually a peripheral, triangular, dense, homogenous shadow extending in from the periphery toward the hilum, with the base at the periphery. The so-called central pneumonia is usually medial and posterior, but lateral views show that it also is peripheral in origin. A characteristic, very early sign of lobar pneumonia is an increased density of the cardiac shadow, due to consolidation of the lung behind the heart. Compare the densities of the cardiac shadows on each side of the midline." These points are fixed in our minds by referring to the appropriate plate and roentgenogram.

Throughout the book, the practical material is presented in outline form, so that it is readily available in a moment's notice. Scarcely any active surgeon, general practitioner, or internist can read this book for one-half hour, and then fail to buy it.

★ News ★

Courtesy, Eastman Kodak Co.

Comparison of the new Safelight (left) with the older type (right).

A New Dark-Room Light

MORE FILMS ARE RUINED in the dark room than are spoiled by improper exposure or other technical errors. Much of this loss results from fumbling in the semi-darkness of dim safelight illumination. Therefore radiographers will welcome a newly developed safelight, especially for use with x-ray film, which transmits many times more visible light than those now generally used.

The new product is the Wratten Safelight, Series 6B, just announced by the Eastman Kodak Company and pictured above. Used in a direct-type safelight lamp, this lamp transmits ten times more useful light than the older 6A, and with indirect-type safelights, sixty times as much illumination is provided, so that every operation in the manipulation and processing of x-ray film may be performed by *sight*, rather than by *touch*. Eyestrain is minimized, and working conditions are improved.

A Living for the Doctor

The Business of Medicine and the Art of Living

★

Associate Editor: Ralph L. Gorrell, B.S.M., M.D., D.N.B.

The Dispensing Physician and the Prescribing Pharmacist

ONE EVIL that the depression accentuated is the custom of doctors' selling medicine. While no one will deny that a small stock of medicinals for use in the "bag" and around the office is perfectly proper, it would seem that the physician who dispenses is stepping out of his field.

An individual doctor cannot carry a wide enough range of drugs to treat all the various complaints that come to him, unless he is of the type (still somewhat prevalent) that gives "pill Number 2" for diarrhea; "Number 3" for cough; and "Number 4" for anemia, without making a diagnosis. There is the constant temptation to substitute one medicine for another, if the stock is small. If it is large, deterioration plays a part in rendering the medicines less effective.

Over and above these criticisms is the simple fact that no physician graduated in the past fifteen years knows anything worth while about materia medica. You don't believe me? Doctors buy medicines that have never been proved, scientifically or clinically, under any sort of controlled conditions. They buy "drops" good for the eye, nose, and throat, composition unspecified and action indefinite; they buy expensive proprietary medicines containing from four to ten ingredients, most of whose names mean nothing to them, instead of simple, effective drugs. I have seen in physicians' offices such therapeutic monstrosities as "uterine tonics," "diuretic" pills, "fever" tablets (years after fever has been proved a helpful reaction on the part of the body), and "oxidizing" tablets.

I am not a pharmacist and hold no brief for them. They have faults, plenty of them. It is a rare druggist who does not respond with some medicine or other when a customer complains of any disease, from ulcer and gonorrhea to asthma and appendicitis (the usual laxative). In one city of 25,000, physicians tell me that they rarely see a simple Neisserian urethritis, as the pharmacists sell oral tablets and solutions for irrigations. If complications ensue, then the physician is consulted. It is almost funny at times. I still remember the druggist who asked me to look at a boy's eruption without charge. "He really can't afford to pay a doctor, and I've tried ointments for ringworm, eczema, and scabies without helping him."

Many physicians object to prescribing because they never see their patients again, as the prescription is refilled time after time, though the original condition may have changed and a different line of treatment may be needed; so the doctor gets the blame for not curing the patient. Writing N. R. *(non repetatur)* in the lower left-hand corner of the prescription will indicate that you do not wish it refilled, and ethical pharmacists will obey your wishes.

One rule that many city pharmacies promulgated a few years ago helped to bring on the wave of dispensing. The rule was: "No prescription for less than a dollar." Patients who needed only a small amount of medicine were thus penalized. Another example of a harmful attitude is the habit of charging prescription prices on nationally known packaged merchandise. That is, a bottle of vitamin and iron compound costs the patient eighty cents, if purchased off the shelf, but if the label is washed off and

the pharmacist's prescription label attached, it will cost him from one dollar to a dollar and a half.

What is the answer? In larger cities, prescription pharmacies have arisen which do not attempt to make diagnoses and sell patent medicines. They are ethical, their stock is up to date and they save the patient money by compounding National Formulary or U. S. Pharmacopeial formulas instead of proprietaries. (Don't misunderstand me. There are many good proprietaries, with specific drugs and a certain action, at a moderate price.) In all except the smallest towns, however, there are several pharmacies, and one is usually glad to go into the prescription work thoroughly. In fact, the others soon ask to join in, after the results become apparent.

Some such dual code as this is required:

1.—*On the physician's part:*

A. Not to dispense drugs, except a few for emergencies.

B. To write prescriptions *legibly;* and not to call for new medicines unless the pharmacist has had the chance of obtaining them, or to inform the patient that it will take a few days to obtain them.

C. Not to specify a certain drug store, but rather to mention two or three that are ethical and carry fresh stocks (unless there is only one such store).

2.—*On the pharmacist's part:*

A. *Not to make a diagnosis for the patient.* It cannot be any more than a guess, and valuable time may be lost.

B. Not to counter-prescribe. Because an individual states that he has an ulcer (instead of cancer), or gonorrhea (instead of a urinary infection), is no reason for giving him patent medicines. If a customer asks for "St. John's Rheumatism Pills," there would be no objection to selling them to him.

C. Not to refill a prescription without calling the physician.

RALPH L. GORRELL, M.D.
Clarion, Iowa.

[Here is one thoughtful physician's view of a question that has been more or less controversial for years, and which still needs thorough and unemotional discussion.

We will be glad to hear from physicians and pharmacists who agree or disagree with Dr. Gorrell, or who have further constructive suggestions to offer, and to publish such communications as show evidence of experience, thought, and understanding of the problems involved.—ED.]

★ *Notes and Abstracts* ★

Pertinent Questions*

AFTER READING the dozens of editorials in the daily press, as expressed in the leading newspapers from coast to coast, the carefully worded propaganda of the professional politicians, the theories of the "social workers," and the cleverly phrased statements of our "political reformers" in Washington, as well as the propaganda put forth by the "Committee of 430 Doctors," cleverly timed for the Sunday editions of our big, daily newspapers on November 7, 1937, one cannot help but ask the question: Is all of this hullabaloo conscientiously and honestly put forth for the actual benefit of the "dear people" who really constitute the bulk of our population, or is it a movement to cleverly deceive the public into believing that "the government" is going to "do something nice" for the people, and that this self-appointed Committee of 430 Doctors is not, at least for the most part, primarily activated by the desire to get onto the political bandwagon for its own benefit?

It should be remembered that, after the World War, a theoretic proposition was "put across" by the politicians that it was far better and cheaper to care for the invalided ex-service men of our Army and Navy by having a separate political bureau in Washington handle the matter. After this political bureau (the Veterans' Bureau) was fully formed and got under way, and had spent many hundreds of millions of dollars in building hospitals and hiring politically controlled "medical directors," "regional directors," and other political appointees too numerous to mention, as well

Bul. Evanston Branch, Chicago M.S., Sept., 1938.

as a very large number of physicians, on a salary and under political domination, it was then discovered that it was costing the people of the United States more than five times as much to care for these ex-service invalids as it would have cost to care for them in the civil or regular hospitals that existed before the Veterans' Bureau went into existence. Furthermore, the veterans were not and are not getting as competent care and attention as they would if cared for in the regular hospitals by the regular physicians and surgeons in regular practice. In fact, the wrath of the people rose to such an extent over this discovery that the politicians in Washington changed the *name* of these Veterans' Hospitals, and now there are *no* "Veterans' Hospitals." Instead, overnight they all became "Veterans' Facilities." However, all of the political pigs are feeding at the trough as usual, and the poor ex-service men are getting probably still poorer care than they did before.

The question arises: Will the President's model "National Health Conference," conducted in Washington largely at the expense of the taxpayers of the country, and cleverly advertised by the propaganda department of the political group now in power in Washington, result in even as good an experiment as is the Veterans' Bureau? We are largely creatures of "mob psychology." At the present time, we are headed toward the socialistic and communistic ways, but let us not forget that our present high standards of efficient medical care at reasonable prices that all people can pay, if they are not impoverished by unwise and oppressive general taxation, were produced under the standards and ideals of rugged individualism.

GENTZ PERRY, M.D.

Evanston, Ill.

Ruined

Letter of Explanation from a Patient of W. C. B., of Lansing, Mich.

MY DEAR DOCTOR:

I wish to inform you that the present shattered condition of my bank account makes it impossible for me to send you my check in response to your request. My present financial condition is due to the effects of the Federal Laws, Corporation Laws, By-Laws, Brother-in-Laws, Mother-in-Laws, and Out-Laws that have been forced upon an unsuspecting public and me. Through these various laws I have been held down, held up, sat on, walked on, flattened, squeezed, and broken, until I do not know what I am, where I am, or why I am.

These laws compel me to pay a Merchant Tax, Capital Tax, Excise Tax, Incorporation Tax, Real Estate Tax, Property Tax, Auto Tax, Light Tax, Water Tax, Cigar Tax, School Tax, Syntax, Liquor Tax, and Carpet Tax.

In addition to these taxes, I am requested and required to contribute to every society and organization that the inventive mind of man can conceive and organize. To the Society of St. John; the Baptist Women's Relief; Navy League; The Children's Home; The Policemen's Benefit; The Dorcas Society; The Y. M. C. A.; The Gold Diggers' Home; also to every hospital and charitable organization in town, the Red Cross, the Black Cross, the White Cross, the Purple Cross, the Flaming Cross, and the Double Cross.

The government has so governed my business that I do not know who owns it. I am suspected, expected, disregarded, examined, re-examined, informed, required, commanded, and compelled, until all I know is that I am supposed to provide an inexhaustible supply of money for every known and unknown need, desire, or hope of the Human Race, and because I refuse to donate to all and then go out and beg, borrow, or steal money to give away, I am ousted, cussed, discussed, boycotted, talked to, talked about, lied to, held up, held down, and robbed until I am just about ruined.

The only reason I am clinging to life at all is to see what in thunder is coming next.

Yours very truly,

X. Y. Z.

Surgeon, Retired

HE LIFTS both hands and turns them, palms up, to
Inspection of his questioning, baffled eyes;
Hands famous once for tender enterprise
Of surgery. Time and again, they threw
The dice with death, and operating, won—
No x-rays in those years! By touch alone
Was suffering probed to source of nerves and bone.
How many babies they brought to the sun!

Physician, heal thyself? His vision lingers
In diagnosis of each stiffened knuckle;
Unsteady, blunt, antennæ-tips of fingers.
What irony, that mercy's hands must truckle
To age, the while keen brain cells functioning still
Lack but obedience to serve their skill.

ETHEL ROMIG FULLER.

Portland, Ore.

Thought is Tough

THE REASON why thinking is hard work is, no doubt, because, for most men, it is far easier to act than to think; but action without thought makes little for progress. Strange it is that for the many it is less exhausting to give one's life to the turmoil and bustle of the day than it is to sit down in quietness and attempt to unravel the tangled threads of personal, civic, and industrial situations.

Despite the "action" of the many, however, it is the wise and discriminating *thinking* of the few that is needed far more than the hustling of those who avidly pursue the American false ideal of "success." It would seem that even the "busiest one" in good causes may be too highly evaluated; perhaps, at times, a little more thought may bring us nearer to the "consummation devoutly wished for" than being "too busy."

In the last analysis, may it not be that it is not the hustler who "gets things done," but rather the men who study, analyze, and then express, in actions, the deductions from their analyses?

Industrial history attests—what? Will someone please tell us where are the "Captains of Industry" who flourished in the era of what President Theodore Roosevelt called the "Plunderbund," and "Malefactors of Great Wealth," etc. They *were* hustlers all, but their thoughts, such as they had, were centered solely in self-aggrandizement, and largely in the accumulation of wealth for themselves—regardless.

Most of them, even their names, are unknown to the present generation; they are forgotten; they merited not even an obscure footnote in history. Yet in their day they were numbered among the "great ones" of the world.

The thinker, to the contrary, has it in his power to create a nation (consider Washington and Franklin); to free men from bondage (consider Lincoln); to bring light where there is darkness (consider Edison); to arouse hope where there is hopelessness (consider Trudeau); and so we might go on.

But *thought is tough*, especially when it is given vicariously for the benefit of others. In fact, so tough are our thoughts concerning others that we take the easiest way out—and never think of them at all.—*Kalends of the Waverly Press.*

Shall I Study Medicine?

WHEN YOUNG MEN ask me if I would advise them to study medicine, my invariable answer is in the negative.

"But are you sorry you are a doctor?"

"No."

"Then why do you advise against it?"

"Because you can't hope to become a good doctor unless you are convinced, without asking advice, that no other profession could satisfy you."—WILLIAM N. MACARTNEY, M.D., in "Fifty Years a Country Doctor."

★ *Books* ★

How to Study

KAHN

HOW TO STUDY. *By* SAMUEL KAHN, M.D., Ph.D., *Author of "Sing Sing Criminals", "Mentality and Homosexuality" Associate and Contributing Editor,* The Modern Psychologist *and the Psychology Journals, New York; Head, Department of Psychology, Commerce University of the South; Director, Atlanta Psychoanalytical Society. Formerly, Clinical Professor of Psychiatry at Georgetown and George Washington Universities, et cetera. Boston: Meador Publishing Company. 1938. Price, $2.00.*

THE average physician probably does not really *study* ten hours a year. This does not mean the reading of current literature, by which one adds to one's previous knowledge, whose foundation was laid in medical school, but the serious pursuit of entirely or relatively new subjects.

Dr. Kahn's treatise represents the best that past and contemporary thought has to offer on the important subject of how to keep one's mind young and growing. As he so pertinently remarks, one's knowledge does not remain the same; it either increases or dwindles away.

On reading this small book, one's thoughts revert to school days, with the longing that this book might have been available, so that much time would not have been wasted and that study would have been simplified and made more useful, to the end that more knowledge could have been gained during those precious years. Practical advice is given on how to avoid physical obstacles to study and how to prevent mental conflicts and emotional disturbances from interfering with concentration.

SATISFACTION

***The only commodity that is ever for sale is satisfaction. You don't buy bricks and stones, shingles and nails; you don't even buy a house (or a car or a suit of clothes or a bottle of medicine). What you buy is a selected group of satisfactions; things that make your life easier, better, and more efficient.*—The Perfect Home Magazine.**

The Seminar

"A Monthly Postgraduate Course"

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(NOTE: Our readers are cordially invited to submit fully worked up problems to the Seminar and to take part in the discussion of any or all problems submitted.

Discussions should reach this office not later than the 5th of the month following the appearance of the problem.

Address all communications intended for this department to The Seminar, care CLINICAL MEDICINE AND SURGERY, Waukegan, Illinois.)

Problem No. 10 (Medical)

Presented by G. R. Kamman, M.D., F.A.C.P., St. Paul, Minn.

(See CLIN. MED. & SURG., Oct., 1938, p. 491)

RECAPITULATION: A man of 54 years, who was a chronic alcoholic, suffered a leg fracture and was put in a hospital. On the third day he developed symptoms of delirium tremens, and was given 20 grains of sodium bromide five times daily, and occasional hypodermic injections of morphine. Under this treatment he became worse, and the more disturbed he became, the more bromide was given.

Ten days later, when I saw him, he was semi-stuporous, noisy, incoherent, and restless. His eyes were glassy, breath fetid, tongue furred, and speech slurring. His movements were ataxic and all tendon reflexes abolished, but there were no pathologic reflexes. His temperature varied between 100° and 102° F. His urine and blood showed no ordinary pathologic changes.

Requirements: Suggest tentative diagnosis, *giving reasons.* What further information would you require?

Discussion by E. C. Junger, M.D., Soldier, Ia.

This problem is a double feature. The fracture, per se, is not so important as the chronic alcoholism, when treatment is considered. To set the fracture and apply a cast creates little disturbance to this patient, especially if his position is changed occasionally, to prevent ether pneumonia; but to soak a body with bromides, instead of the accustomed alcoholics, is bad practice. A little codeine will supply needed sedation. A quart of whiskey in 24 hours will wake this man up and make him the life of that ward.

The fracture knocked one crutch from under this cripple. The bromides put the skids under the other. It is a grave mistake to deprive any patient of whatever habit he or she has had, all at once, and complicate, if not endanger, the course and favorable prognosis of any sickness or accident that overtakes them.

Discussion by Martin G. Flom, M.D., Zumbrota, Minn.

The history in this case leads me to make a tentative diagnosis of *bromide toxicosis.* The bromide concentration of the blood would establish a definite diagnosis.

My plan of treatment would be to discontinue the sodium bromide immediately, and increase elimination by forcing fluids —a minimum of 4000 cc. daily—the fluids being solutions of dextrose, for its nutrient value, and sodium chloride 12 to 16 grams daily, together with chlorides in the diet. Sodium chloride aids in elimination of the bromides by its neutralizing action. One gram of sodium chloride will neutralize 5.8 grams of the bromide. The diet should be high in caloric value and rich in vitamins.

Discussion by Frederick Weiss, M.D., Harvey, Ill.

This problem is inadequate, in itself, to permit making a tentative diagnosis, inasmuch as there is a paucity of information and an abundance of conditions that must be differentiated.

From the case history alone, one must first consider a *bromide intoxication,* especially with the symptoms becoming more severe with the continued administration of the bromides. Other conditions to bear in mind are possible *cerebral phenomena,* such as a fractured skull, with delayed hemorrhage and progressive compression, or em-

bolism from the fractured site. Again, one must bear in mind *general paresis.*

The temperature may be explained on a basis of either inanition ketosis, cerebral accident, infection at the site of fracture, or lung congestion.

With the establishment of the diagnosis, if possible, treatment then may ensue.

The work-up in this case should be a more adequate history; repeated blood pressure readings; a complete neurologic examination; eye-grounds study; blood and spinal Wassermann tests; and, if indicated, diagnostic spinal puncture and x-ray studies of the skull.

Treatment of bromide intoxication consists of the withdrawal of the drug and replacement with sodium chloride solution, administered orally or parenterally (to displace the Br. ion); the use of other sedatives, such as the barbiturates or paraldehyde, if the delirium tremens recurs; stimulants, as indicated. If other conditions are found to be present, instead of the one assumed, they should be treated accordingly.

Discussion by Leon Reznikoff, M.D., Secaucus, N. J.

In this case we have a history of chronic inebriety in a man 54 years old who, while under treatment for fractures, and being deprived of alcohol, developed an attack of delirium tremens. Ten days later, a neurologic examination revealed ataxia and loss of the deep reflexes. Since it is stated in the problem that examination of urine and blood showed no abnormal changes, I assume that the blood Wassermann reaction was performed and reported negative, and would suggest that the patient should have a lumbar puncture; first, to relieve the intracranial pressure, and second, for the purpose of examining the spinal fluid for Wassermann reaction, globulin, proteins, colloidal gold, cell count, etc., in order to rule out syphilis of the central nervous system.

In addition to a careful neurologic examination, at a time when the patient is more cooperative, an ophthalmoscopic examination of the fundi should be performed.

For diagnosis we must consider *syphilis of the central nervous system* (tabes dorsalis, general paresis, tabo-paresis, etc.) and *multiple neuritis.*

The treatment of syphilis of the central nervous system is well known (hyperpyrexia, tryparsamide, arsphenamine, bismuth, etc.).

Assuming that the spinal fluid is reported negative, we must consider multiple neuritis as the likely diagnosis, treatment of which consists of the hypodermic administration of large doses of vitamin B.

Delirium tremens is relieved by repeated lumbar punctures, subcutaneous injections of ergot, sedatives, elimination by diuretics and cathartics, and general supportive treatment.

Discussion by G. M. Russell, M.D., Billings, Mont.

As to further information, I should want an examination of the spinal fluid; also an examination of the blood as to the percentage of bromides.

Deprivation of alcohol may have had some effect in producing the condition described.

The diagnosis lies between a continuance of the *delirium tremens* and *acute bromism.* I rather incline toward the latter.

Treatment would depend upon the spinal fluid and blood examination. Tentatively, I should have stopped the bromides and given sodium chloride intravenously, and if the pressure of the spinal fluid was higher than normal, spinal taps and intravenous injections of 50 percent dextrose solution.

Discussion by Charles P. Ryland, M.D., Washington, D.C.

My tentative diagnosis is *bromide intoxication or psychosis,* which I should like confirmed by the finding of bromide in the urine; but preferably by having a determination of the bromide content of the blood made. Both these methods are described fully in my article, "Bromide Intoxication or Bromide Psychosis," which appeared in the *Virginia Medical Monthly,* August, 1934.

A report of no bromide in either the blood or urine would not mean that the diagnosis was incorrect. U. J. Wile, of the University of Michigan, advised me, in a personal communication, that occasionally a case may be seen which is clinically bromide intoxication without any doubt whatever, but in which bromide may be absent from both the urine and blood. This is due to the fact that bromides are stored in the body tissues, probably the liver mainly, and not in the circulation. If such a report were received in this case, I would recommend the injection of from 150 to 300 cc. of physiologic saline solution intravenously. The sodium chloride would dislodge the bromide from the body tissues and then they would be found in the blood and urine.

From the history I am unable to determine how much sodium bromide this man received, but it is stated that his feedings were neglected, hence he had a negligible intake of sodium chloride. He started receiving the bromide in daily doses of about 7 Gm., which was later increased. It is stated that bromide intoxication will occur in three weeks if equal amounts of bromide and chloride are taken. This patient developed it in ten days, due to the large

doses taken and the negligible intake of sodium chloride. No mention is made of any rash, as he probably did not have time to develop it in his short period of medication.

I should venture a guess that the bromide content of the blood of this patient would be from 250 to 300 mg. per 100 cc. of blood serum. Anything above 150 mg. is in the "toxic zone."

In the treatment of this condition, sodium chloride is a specific, but it must be given carefully, since there is the danger of kidney injury (with edema), if there is a rapid excretion of bromide following the ingestion of large amounts of sodium chloride.

As far as this patient is concerned, I should discontinue the sodium bromide immediately, and order 100 cc. of physiologic saline solution at once. From 12 to 18 hours later, I should give him about 250 cc. of saline solution intravenously. The next day I should give him sodium chloride 2 Gm., in divided doses (by mouth, in capsules), continuing this until a definite improvement was noted, then reducing the dose to 1.3 Gm. daily, until the bromide content of the blood was negligible. Other men would probably order large doses of saline solution immediately, and also larger doses of sodium chloride by mouth; but I am a conservative and hence am afraid of kidney damage in a man of 54 years, who possibly has some cardiovascular-renal disease.

Discussion by R. L. Gorrell, M.D., Clarion, Ia.

As it is stated that the diagnosis could be made on clinical grounds, one must carefully inventory every possible cause of the acute psychosis. Delirium tremens frequently occurs in alcoholics who are deprived of their usual stimulant while in the hospital. I remember one elderly man who died of cerebral edema and delirium tremens, while recovering from bilateral fractures of the patellae. He was overdosed with morphine and sedatives, to control restlessness, just as happened to the patient under discussion. At that time, there was no method of testing for bromide poisoning.

This patient was receiving an overdose of bromide (100 grains) each day. The symptoms of bromide poisoning are: (1) Psychosis; (2) sudden and extensive "acne"; (3) a staggering gait; (4) lethargy and mental dullness; (5) foul breath and coated tongue; (6) slurring speech; and (7) slowing of the pulse rate (Beckmann).

Henry ("Essentials of Psychiatry," Williams and Wilkins Company) states, "In the early stages of bromide intoxication, the person becomes drowsy, irritable, and forgetful. Hallucinations follow, which may be terrifying and cause the patient to *move about restlessly*. There may be alternating periods of excitement and stupor. Bromide delirium may continue for several weeks after the drug is stopped."

The diagnosis could be confirmed by: (1) Examination of the blood for bromine content; or (2) examination of the urine for bromine; and (3) by response to intravenous injections of sodium chloride solution. The bromine ion displaces the chlorine ion, which leads to prompt elimination of the chlorides and chloride deficiency (Trumper, in "Memoranda of Toxicology," P. Blakiston's Son & Co.). It might be possible that the administration of sodium chloride *with* the bromides would prevent the disturbances in the nervous and gastro-intestinal systems, which are so obvious in some persons, but I have not been able to find anything in the literature on this point.

Trumper suggests a simple test for bromine in any body fluid: Add to the suspected body fluid, in a test tube, a few crystals of potassium permanganate and a few drops of concentrated sulphuric acid. Moisten with dilute acetic acid a small strip of filter paper, which has been previously immersed in about one-tenth of one percent fluorescein solution, then soaked in 50 percent acetic acid and dried. Shake the test tube and hold this treated filter paper over the mouth of the tube. If bromine vapor is present, a bright-pink color appears, in contrast to the lemon yellow of the fluorescein. This test is so sensitive that one part of bromine can be detected in 50,000 parts of urine.

Patients who take bromides on their own initiative may become emotionally unstable. The physician who does not inquire as to previous medication may give bromides and thus increase the poisoning.

Solution by Dr. Kamman *

A clinical diagnosis of bromide poisoning was made, although the small hospital did not have facilities for determining the amount of bromide in the blood.

All sedatives were discontinued, a spinal drainage was performed (Wassermann test on fluid negative) and the patient was given physiologic saline solution intravenously, as well as sodium chloride by mouth. An increased chloride intake facilitates the elimination of bromide, and vice versa. Patients who are not eating well, and thus not taking enough chloride, should not receive bromides, as the drug will displace the chloride in the blood and other body fluids.

On the third day, the patient was much

*Adapted from *Minn. Med.*, July, 1938.

Continued on page 599

Clinical Notes and Abstracts

★

Diagnosis of Diarrhea

THESE aphorisms may be helpfully suggestive in the diagnostic phases of diarrhea:

1.—The diagnosis of amebic dysentery cannot be established from the roentgenologic findings.

2.—Typical punched-out ulcers are found on proctoscopic examination in over 80 percent of patients suffering from amebic dysentery, and smears obtained by this examination are found to contain amebae in 90 percent.

3.—*Diarrhea, or other change in bowel movements (mucus, flatus, alternating constipation and diarrhea), are not, in themselves, diagnostic* of any pathologic condition—they merely point to the necessity of a digital and proctoscopic examination, supplemented by roentgenologic examination where necessary.

4.—*Bleeding from the rectum should not be ascribed to hemorrhoids* until digital and proctoscopic examination have failed to reveal a malignant condition.[1, 2]

It is a fairly safe rule to remember that any diarrhea which fails to respond to adequate specific treatment is not due to amebic dysentery.[1]

No examination of the gastro-intestinal tract is complete without a direct view of the rectum and lower colon. Proctoscopy and sigmoidoscopy may be carried out by the general practitioner who remembers to be careful and gentle. What is seen through the instrument? In acute diarrhea, edema, redness, and swelling of the anal ring will be found, and possibly an acutely thrombosed hemorrhoid. Multiple fissuring of the anus, larger longitudinal breaks in the mucosa, or petechial spots, may be present, and result in oozing of blood on simple eversion of the anus during inspection. Hot sitz baths, hot applications, warm-water enemas (through a soft catheter), or retention enemas of warm oil may be necessary, over a period of several days, before the proctoscope may be introduced.

When the rectal mucosa is viewed early in the course of acute diarrhea, an active hyperemia is found in the last several inches of the rectum. The blood vessels are engorged and stand out in a spider-web appearance, resembling a nevus. After several days, the bowel wall becomes edematous and appears glistening and translucent, as if thickened. At this stage, bleeding follows swabbing of the mucosal surface.

We should not ask the patient if he has diarrhea, but rather how many times he goes to stool. If he passes "mucus and wind" six times a day, he should be suspected of harboring a malignant condition of the bowel, assuming that acute diarrhea has subsided.

In chronic diarrhea, these conditions should be suspected: (1) Nonspecific ulcerative colitis, which may be diagnosed by the granular, glistening mucosal appearance and the presence of many, minute (1 to 4 mm.) abscesses and ulcerations, which give the bowel a patchy appearance, as if one had given a shake of pepper to an area; (2) amebiasis, which may be recognized by the finding of punched-out ulcers and the organism in the stool and on smears taken at the time of sigmoidoscopy; (3) carcinoma, which may appear as a cauliflower mass, as a small ulcer with slightly raised indurated edges, as a solitary adenomatous mass, or as a scirrhous, stenosing inflammation and ulceration (napkin-ring deformity may be demonstrated by a barium enema and roentgenogram). A biopsy may be obtained, preferably at the margin of normal bowel and the growth. The degree of fixation may be determined by digital examination or by cautiously manipulating the end of the instrument. If obstruction is present, an irrigating catheter may be passed through the lesion and thus the bowel *may be decompressed* by permitting the passage of gas and feces.

R. L. G.

1.—Ruffin, J. M.: Amebic Dysentery. *Am. J. Dig. Dis.* 5:153-155 (May), 1938.

2.—Ault, Garnett W.: The Proctologic Aspects of Diarrhea. *Am. J. Dig. Dis.*, 155-162 (May), 1938.

The Relief of Pain in Arthritis by Regional and Local Analgesia*

The pain of chronic arthritis does not arise from within the articulation, since the intra-articular structures, such as the cartilages, are devoid of nerve supply. The pain arises from the periosteum, insertions of the joint capsule, and other periarticular structures.

The analgesic response to procaine derivatives, given by injection, is satisfactory but brief. Repeated injections result in a decrease of tenderness. For more prolonged analgesic effects, solutions of anesthetics in oil, such as Eucupin solution in oil, (Rare Chemicals, Inc.), give relief over a prolonged period of time. I reserve the use of the oily anesthetics for intractable cases, which do not respond to injections of procaine solution.

Lumbar neuralgias, low back pains, painful knees and other joints, brachial, intercostal and sciatic neuralgias, metatarsalgia, spondylitis, bunions, tenosynovitis, bursitis (especially of the subdeltoid bursa), exostoses, myalgias, and myofibrositis, all may be treated by such injections. Where sepsis and visceral disease can be ruled out, all painful rheumatic and traumatic affections of the locomotor system may be so treated.

Technic: The points of maximum tenderness are determined by palpation around the joint. A wheal is raised and a 2- or 3-inch needle, 22-gage, is inserted through the wheal. The procaine or oily anesthetic solution is injected close to the periosteum, exercising care that the capsule is not penetrated. Such periarticular injections relieve pain promptly, and encourage movement.

Injections around the bones relieve the pain of metatarsalgia and painful heel due to a spur. Brachial plexus blocks often give dramatic results in the treatment of brachial neuritis. A few cases of coxalgia, osteoarthritis of the knee, and subacromial (subdeltoid) bursitis gained marked relief from pain. It is deemed best to expand the bursa with 20 cc. of 1-percent procaine solution, as the roentgenogram shows calcification in practically every case.

JAMES M. TARSY, M.D.
Brooklyn, New York.

[In several centers, the work of relieving pain by localized injections, is going on. When the general practitioner definitely relieves the pain of lumbago, sprains, neuritis, "stiff neck," and other non-fatal but painful conditions, the chiropractor and his like will no longer receive the bulk of their patients. An article on this point will soon appear in CLINICAL MEDICINE AND SURGERY.—ED.]

*Med. Rec., Oct. 5, 1938.

Carbon Dioxide Inhalation in Pulmonary Tuberculosis

THE ADMINISTRATION OF A MIXTURE of 10 percent carbon dioxide and 90 percent oxygen, by means of repeated inhalations, is safe and has these benefits: (1) Easy, effortless expectoration; (2) diminished cough; and (3) relief from dyspnea. Less narcotic and expectorant drugs were necessary. The patients slept better and felt better.

Viscid and mucopurulent plugs are coughed up out of the bronchi, thus preventing the formation of atelectatic areas. Postural drainage should be carried out for a few minutes after the inhalation if the patient is too debilitated to cough well. An inhalation of from 15 to 30 minutes daily is usually adequate, although it may be repeated several times daily if the patient finds it difficult to raise thick sputum.—A. L. BANYAI, M.D., in *Dis. Chest*, Sept., 1938.

Bromide Poisoning*

Hypnotics and sedatives do not cure. Their function is merely to mitigate, to intercede between man and his environment, and to serve as a buffer which absorbs part of the constant and unrelenting barrage of stimuli to which man is subjected.

Bromide poisoning is much more frequent than we have realized. Mental symptoms may result from therapeutic doses of the bromides. These symptoms range from a mild clouding of consciousness to an active delirium, and from mental depression to stupor and coma. The elimination of bromide from the body is very slow, so that a cumulative effect is readily obtained. A single dose of bromide may result in a positive test for bromine in the urine as long as twenty days later.

Symptoms: (1) Mental sluggishness; (2) indifference; (3) mental dullness; (4) normal orientation and absence of hallucinations or delusions; and (5) slow mental and physical reactions. There may be an acute psychosis, with clouding of consciousness, distractability, incoherent thinking, delusions and hallucinations.

Prevention: If an ample supply of sodium chloride is given, the tendency to bromide poisoning is much reduced. Four (4) grains of sodium chloride will balance one

*Minn. Med., July, 1938.

grain of bromide, so that 12 Gm. of sodium chloride should be given to the patient who is receiving 3 Gm. (45 grains) of bromide each day.

Treatment: Bromides must be stopped at once, in spite of intense restlessness and disturbed mental condition. Sodium chloride solution should be given intravenously. Restlessness should be controlled by continuous baths or neutral body packs (*not hot*, as sweating will cause more chloride to leave the body). Sodium-Amytal may be given intravenously, or paraldehyde rectally, to patients who need rest.

GORDON R. KAMMAN, M.D., F.A.C.P.
St. Paul, Minn.

Diagnosis of Functional Cardiac Disorders

WHEN organic disease of the heart (enlargement of the heart, as determined by percussion and a roentgenogram; limited cardiac reserve; elevated systolic and diastolic blood pressures; and organic murmurs) can neither be found nor definitely suspected, then a psychologic cause should be sought. In these cases, tachycardia of 120 beats per minute, at the beginning of a consultation, may be 100 at the end, and a simple exercise-tolerance test often reduces the rate still further; whereas, when a physical cause is present, the rate tends to rise rather than fall. *Cardiac tonics must be avoided.*

Extrasystoles may occur with or without cardiac disease. If the extrasystoles disappear with exertion and increased heart rate, they are not of serious consequence. Dyspnea is a symptom indicative of definite myocardial damage, if it is brought on by exertion which is ordinary for the individual.—A. G. GIBSON, M.D., in *Med. Rec.*, Oct. 5, 1938.

Mortality of Women According to Build*

OVERWEIGHT IN WOMEN, as well as in men, is unfavorable to longevity, and this bad effect is pretty much in direct proportion to the degree of overweight.

Except at the younger ages, the trend of mortality according to weight is definitely toward a progression from a low mortality among underweights to a high mortality among the obese. For women under age 30, the underweights had a somewhat higher mortality than the overweight group as a whole, but even at these ages, the tendency was in the same direction as at the older ages.

Tall women, except at ages under 30, show a lower mortality than those of medium or of short height. Their superiority to the other height groups did not extend to the obese, who, in all height groups, had approximately the same mortality, nor to tall young underweights, whose mortality is higher than that of other young risks. This condition is not so much an attribute of tallness, as such, but rather due to the fact that the tall group, as a whole, has a more favorable social, economic, and racial composition.

Overweight women showed characteristically high death rates from chronic degenerative disease of the circulatory system and kidneys, from diabetes, from most surgical diseases, particularly biliary tract disease, uterine tumors, pelvic disease, appendicitis, diseases of child-bearing, as a whole, and hepatic disease.

Underweights suffer a high mortality from tuberculosis and pneumonia. No definite trend of mortality, according to weight, is discernible for cancer, accidents, or suicide.

The extra weight carried by obese women eventually causes a premature breakdown of the circulatory system, and makes them an easy prey to diabetes and all diseases affecting the liver and gallbladder. The mortality for most surgical conditions is high among them, but it is likely that, for certain of these conditions, at least, this is due to a higher incidence of such conditions than to a higher operative mortality, for obesity is an unfavorable factor in surgical results.

Underweights run greater risks chiefly from tuberculosis and, to some extent, from pneumonia, but the extra mortality from these diseases is far outweighed by their low mortality from degenerative and metabolic diseases.

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*Abstract of a paper read before the 49th annual meeting of the Association of Life Insurance Medical Directors of America, October 20, 1938.

A Cure for Amyloidosis

THIRTEEN (13) cases of amyloidosis, secondary to chronic suppurative disease in children, were treated with oral administration of powdered whole liver extract. Six (6) of these cases have been completely free from all clinical signs of amyloidosis over long periods of time. Four (4) children were in advanced stages of tuberculous and amyloid disease; 2 took small amounts of liver; and the remaining 2 patients died shortly after the treatment was begun.

The clinical improvement of the amyloid state occurred during the presence of the active suppurative infection. Liver therapy must be employed at least two or three years before failure is admitted, even though no clinical improvement takes place. Diminution of the size of the liver and spleen is the first sign of improvement.

Up to this time, amyloidosis has been considered as an irrevocable process and fatality as certain.—H. G. GRAYZEL, M.D., and MENDEL JACOBI, M.D., in *Ann. Int. Med.*, July, 1938.

[No mention is made of the use of intramuscular injections of liver extract, although several of the young patients could not tolerate large enough doses of the dry liver extract. This report is notable because of the improvement in prognosis of a hitherto incurable disease.—ED.]

Treatment of Tenosynovitis and Ganglion*

Simple tenosynovitis is a frequent affection and involves most commonly the sheath of the extensor tendons on the back of the wrist. It is also met with in the foot. The diagnosis depends upon the recognition of the exact extent of the local swelling, which is soft in consistence and yields a characteristic soft fremitus to the examining hand when the appropriate tendons are actively moved. Typewriting, tennis, and other factors may cause overwork. Elastic adhesive tape should be applied to the swollen area for 10 days; the causative factor should be avoided for twice that period. If a toxic element is discoverable (gout, fibrositis), colchicum or sodium salicylate and potassium iodide may be given a trial.

Stenosing tenovaginitis: Operative treatment is simple and satisfactory. After infiltrating the skin over the swelling with one-percent procaine solution, an incision 1½ inches in length is made in the line of the swelling, and dissection carried down to and through the superficial layer of the tendon sheath. The thickened layer encountered is dissected away until the tendons are found to move freely. The skin is then carefully sutured. The operation is preceded by a cleansing of the skin, by using soap and water, ether, and alcohol. Its swift and accurate performance is facilitated by operating in a bloodless field, which may be obtained by elevating the arm for two minutes. A blood pressure apparatus cuff is applied above the elbow, and pumped up to a pressure of 135 mm. This pressure should not be maintained for more than 20 minutes, lest serious nerve injury follow, and should be relaxed before the incision is closed.

Stenosing tenovaginitis occurs in two forms: (1) A chronic thickening of the sheaths of extensor pollicis brevis and abductor pollicis longus; and (2) as a strictly localized thickening of the tendon sheath of a finger flexor opposite the metacarpophalangeal joint, causing the clinical condition of snap-finger. In the first case, an elongated swelling over the radial styloid process is found which does not respond to palliative treatment. The cure of snap-finger requires the operative exposure and removal of the offending local fibrosis. This operation involves a careful dissection in the palm of the hand, and is best regarded as a major surgical procedure.

Simple ganglion is a mucoid degeneration of a fibrotic change in a limited area of the wall of a tendon sheath. There is much to be said for the method of crushing with a bookedge. The attempt may be repeated, if ineffectual, in a few weeks. Local pressure should be applied afterward.

Open operation should be avoided, because of possible injury to a nerve (if it is on flexor surface of the wrist); difficulty in finding all of the sac wall; and exposure of tendons. A tenotome or sharp scalpel may be thrust through the sac from the side of the swelling and a slight rocking motion imparted, so that the limiting membrane will be torn. Gentle pressure is made so that the contents will be dispersed, and pressure applied with elastoplast.

E. P. GOULD, F.R.C.S.

London, England.

*Br. M. J., Aug. 20, 1938.

Diseases of Old Age*

Achylia gastrica, essential hypertension and *vascular disease* are especially important in older persons, because they so commonly occur asymptomatically. Were they kept in mind by the clinician as he examines the patients in the fourth and fifth decades of life, and proper treatment instituted, a break in the compensatory mechanism might be avoided.

If a patient over forty years of age complains that food has no taste unless it is highly seasoned, it is probable that the glossal components of taste are degenerating and that general gastro-intestinal tract atrophy may follow. The treatment of achlorhydria may prevent such atrophy.

Arteriosclerosis is a *disease* of vessels, which manifests itself during senescence, and is not merely a change or transforma-

*Med. Rec., May 18, 1938.

tion attending the process of aging. *Essential hypertension is curable before the advent of arteriosclerosis*, so that early diagnosis and treatment are important.

It has been ascertained that a high gastric acidity in an old person gives promise of longevity. *Gastric carcinoma recruits its victims from those persons who have a low gastric acidity or achlorhydria.*

In old age each symptom must be traced to its source before one can determine its relation to the severity of the disease; whereas, in maturity, a group of symptoms, taken collectively, is diagnostic of a certain disease. In the aged, for example, fever never rises so high as in maturity. The absence of pain does not imply the absence of disease. Postmortem examination may reveal a gastric ulcer in a patient who had never presented any of its symptoms.

Diet is the first line of defense against disease. The administration of drugs is of far less importance than the willingness to listen to the many aberrations of the old person who feels neglected and unhappy. Cathartics should not be used, as constipation in older persons is often due to rectal impaction of feces. A better procedure is the administration of low enemas.

"The mere fact of willing attention, cheerfully bestowed, is often, in itself, the best remedy to rule out many ills" (Lambert).

MEYER GOLOB, M.D.

New York City.

Local Anesthesia During Delivery

THE LOCAL INJECTION of procaine solution into the lower section of the vulva during the distension period cannot be too highly extolled. It at once softens and numbs these parts and the pain is so minimized that the patient scarcely feels the passage of the head. This procedure should always be carried out in primaparas, in sensitive women, or in cases where the birth seems definitely delayed due to rigidity of the perineum.

If a similar injection is made into the cervix, pain is lessened and the rigidity of the cervical fibres alleviated. The patient experiences little pain after the neck of the os is injected. She can bear down better and aid in the birth. In making such an injection into the fibers of the os uteri, a special syringe, such as a tonsil syringe, should be used, with a short, stubby needle.—D. B. MCCARTIE, M.D., in *Med. Rec.*, Sept. 21, 1938.

[Infiltration of the perineum with 0.5- or 1-percent procaine solution, or better, Nupercaine solution 1:1000 (the anesthesia lasts for six hours or more), prevents the appearance of the pain caused by distension of the vulva. Labors are safer, because dangerous narcotics and anesthetics are used in small amounts. Before any injection into the perineum or cervix is made, careful cleansing with sterile soap and water should be carried out, and a mild antiseptic applied.—ED.]

Rheumatoid Arthritis*

Tuberculosis, syphilis, and rheumatoid arthritis constitute the great triad of chronic granulomatous infections prevalent in our climate. The last-named is one of the few remaining unsolved problems in the field of infectious diseases.

Diagnosis: Rheumatoid arthritis may be diagnosed positively by microscopic study of synovial tissue, but the opportunity for taking a biopsy specimen is not common. A vascular granulation tissue containing collections of lymphoid cells is found. Subcutaneous nodules may be excised and a pathologic diagnosis thus obtained.

Clinical Criteria: The *fusiform finger* is the most important diagnostic point. Periarticular swelling is a feature of any form of joint infection, but the doughy enlargement of the proximal interphalangeal joints of the fingers is the outstanding sign of rheumatoid arthritis. It usually appears early and may persist for years. Eventually, as the disease passes into the inactive stage, the swelling in large part disappears and is replaced by ankylosis and deformity. Almost as frequent is a swelling of several knuckles, which, when accompanied by atrophy of the interossei muscles, gives the hand its characteristic appearance.

The second criterion is the *multiplicity of joints* involved (it is rare to see only one joint affected).

Other diagnostic points are: cold, clammy hands; involvement of the wrists and an early tendency to ankylosis; the knees, feet, elbows and cervical spine are also frequently involved, with the hips and toes usually escaping.

Radiographic Criteria: There is characteristic decalcification of the bones and soft-tissue swelling; the interarticular joint space is narrowed, due to thinning of the cartilage; and the whole joint architecture is blurred.

Serologic Criteria: The *Streptococcus hemolyticus* is frequently agglutinated by the patient's serum (67 to 97 percent of

*Ann. Int. Med., Oct., 1937.

cases); the sedimentation rate is sharply accelerated; secondary anemia is frequently found.

Cure: We must strive for a complete and permanent cure, as the natural remissions in the course of the disease make it very easy to deceive ourselves into believing that one remedy brings about "improvement" in a large number of cases. To be *cured*, there must be no pain, no swelling of joints, no exhaustion and fatigability, and partial or complete return of joint function.

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New York City.

The Increase of Scurvy

WITHIN the past few years, an increasing number of patients affected with scurvy have been brought to the Oregon Children's Hospital. As the prophylactic amount of vitamin C (15 mg. daily) is contained in 300 cc. of breast milk, *scurvy is rarely found in breast-fed babies.*

The vitamin C of cow's milk is largely destroyed by pasteurization or evaporation.

Symptoms: Generalized pallor, tenderness of the legs, pain on motion, and peridental swelling with submucous hemorrhage. Palpably swollen extremities were found in half of the cases, and roentgenograms demonstrated the subperiosteal hemorrhages in other cases. Anorexia and irritability were often the first symptoms.—R. M. OVERSTREET, M.D., in *Northwest Med*, June, 1938.

A Simple Test for Determining the Presence of Gastro-Intestinal Lesions*

IT SEEMS RATIONAL TO ASSUME that a non-toxic substance which is not normally absorbed through the mucosa of the digestive tract, but which might enter the circulation through any break in the mucous membrane, with eventual excretion in the urine, would give valuable information as to the presence or activity of gastro-intestinal lesions.

Phenolphthalein is excreted in the feces to almost 90 percent of its original volume, and free phenolphthalein is usually absent from the urine of those taking it. This drug is administered in solution and in small doses. One (1) Gm. of white phenolphthalein is dissolved in 100 cc. of 95 percent alcohol, and the dose administered is 10 cc. or 0.1 gm. of the drug, diluted to 30 cc. with water. The solution should be administered in the morning, when the patient is fasting, because food may prevent the solution from reaching the gastro-intestinal mucosa, and no food or drink is allowed for one hour afterwards.

Specimens of urine are obtained two and four hours after the patient has taken the phenolphthalein solution, and examined *immediately*, to prevent the appearance of free phenolphthalein from the conjugated chemical which is often present. A ten-percent solution of sodium hydroxide is added until no more pink color forms (if the drug is absent, no color appears).

In every case of ulcer, carcinoma, hematemesis, and ulcerative colitis examined, phenolphthalein was found in the urine. It was found twice in 77 tests on patients who were suffering from other disorders, but who may have been afflicted with a break in the gastro-intestinal mucosa.

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*Am. J. Dig. Dis., Aug., 1938.

Guides for the Use of Protamine Zinc Insulin*

THE BLOOD SUGAR is the most satisfactory measure of insulin activity: (1) The basic blood-sugar level and its complications; (2) paroxysmal hyperglycemia (postprandial, nerve tension, menstrual); and (3) paroxysmal hypoglycemia. Changes from the normal (the blood-sugar drop while fasting and the postprandial hyperglycemia) exist in all but the mildest cases.

Those patients requiring small doses of protamine zinc insulin usually show almost ideal control; those needing larger amounts are prone to have a basic hypoglycemia (noted from midnight to 6 A.M.) and a postprandial hyperglycemia. *Remedy:* Either the insulin and carbohydrate content of the diet is diminished, thus raising the basic blood sugar and lowering the postprandial hyperglycemia, or the carbohydrates are increased and distributed as evenly as possible through the twenty-four hour period, especially the 11 P.M. meal of crackers and milk.

High-strung patients are best taken care of by the regular insulin, as nervous tension often tends to bring on hyperglycemia, which cannot be controlled as readily by the protamine insulin. Menstruating diabetics may have paroxysmal hyperglycemia, and are in danger of insulin reactions after menstruation has ceased.

Exercise, when taken during protamine insulin administration, must be preceded by bread and milk or other longer-acting car-

*J.A.M.A., Jan. 8, 1938.

bohydrate, or hypoglycemia will result. Hypoglycemia due to the longer-acting insulin usually presents *headache, tremor, perspiration,* irritability, palpitation, and blurred vision.

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Common Errors in Handling the "Neurotic" Patient*

Do not be in a hurry with neurotic individuals. The patient can sense when he is being rushed. He frequently enters the physician's office with a determination to tell what is disturbing him. Many hours of anguished wrestling with his problem may have preceded his decision. If the physician is unable to spare the time to listen, to draw out the story and inspire confidence in the patient, he has lost a good opportunity to be of real assistance.

Do not disregard unlikely physical complaints: "My nerves are unraveling"; "My organs are gone"; or "My food tastes queer," are often the presenting complaints in the early stages of a major mental disorder (psychosis).

Do not disregard sudden, unaccountable, or unusual changes in behavior: (1) In a child, such changes may be an aftermath of encephalitis; (2) in a young adult, it may point to dementia precox (schizophrenia); (3) in middle age, one must consider syphilis of the central nervous system; (4) in old persons, senile or arteriosclerotic cerebral changes may have occurred.

Do not neglect to perform a thorough physical and neurologic examination of those patients who have previously been in good mental health and now show mental symptoms. Syphilis is the great imitator, and general paresis may result in such symptoms as fatigue, inability to concentrate, irritability, vague fears, and insomnia.

Do not say, "Forget it," when a patient has described his symptoms. Instead, substitute the invitation, "Tell me about it." It may be that his efforts at forgetting have actually caused the symptoms; and besides, as the patient will tell you, if he could have succeeded in "forgetting about it," he would not have come to you for help. Discuss his difficulties and explain his symptoms in a manner he can understand.

Do not be reluctant to ask your patients about their sexual or marital life. Patients are not so reluctant to discuss such matters as we are led to believe. Misconception regarding the effects of masturbation is a common cause of symptoms.

Do not attempt to argue or reason a person out of his symptoms or beliefs. Family, relatives, and friends, as well as other physicians, have been trying this course and have failed. *Try to find the cause.*

Do not make decisions for your patients nor offer advice, until you are in possession of sufficient pertinent facts and have given them proper consideration. In many instances, the puzzled and uncertain patient, if he is encouraged to talk and his thoughts are guided into proper channels, is capable of making his own decisions. It is much better therapy to teach him to think clearly, to arrive at logical conclusions, and to carry out his own decisions.

I. RODIS, M.D.
Washington, D.C.

*Med. Ann. Dist. Col., Mar., 1938.

The Seminar

Continued from page 592

more quiet and from then on there was a gradual amelioration of symptoms. He was discharged well at the end of ten days.

Problem No. 12 (Medical)*

Presented by William P. Van Wagenen, M.D., Rochester, New York

M.F., A 54-YEAR-OLD white female, was admitted to the hospital with this history: Eight years before admission, the patient sustained an injury to the neck of the right femur — probably a simple fracture — in jumping from a porch to a concrete walk. Pain in the right thigh and knee was the chief complaint following this accident.

From that time, the patient was treated almost continuously for "sciatica," arthritis of the spine, sacro-iliac joint sprain, sacro-iliac arthritis, lumbago, rheumatism, et cetera.

Three years ago, the patient again fell while on board ship. Her symptoms were all exaggerated after this accident. More and more confidence was placed in a traumatic background for all her complaints. One year ago, she noticed some difficulty in walking up and down stairs. Nine months before admission, she first experienced a stabbing pain, radiating from the midthoracic spine around the left chest to the lower sternum.

Four weeks before admission, she noticed a sensation of numbness and weakness, in the legs, which was not relieved by hot baths.

Requirements: What diagnosis should be suspected with this group of symptoms, and what further examinations should be performed?

*Adapted from *N. Y. St. J. M.*

Diagnostic Pointers

★

"Arthritic" Pains

• Pains in the joints, with some stiffness, may be the only symptoms of *hyperparathyroidism*. A specimen of blood will show increased calcium content and decreased phosphorous. Exploration commonly reveals a parathyroid tumor near the thyroid gland, the removal of which results in a cure of the pains and the associated bony decalcification.—A. B. GUTMAN, M.D., and W. B. PARSONS, M.D., in *Ann. Int. Med.*, July, 1938.

Erysipelas vs. Facial Cellulitis

• As facial erysipelas spreads, it involves the ear. On the other hand, all subcutaneous inflammations stop short of the pinna, because of the close adhesion of the skin to the cartilage.—H. BAILEY, M.D., in "Physical Signs in Clinical Surgery" (Wm. Wood and Co.).

Painful, Cold, or Cyanotic Feet

• Cold feet, pain after walking (in the foot or calf of the leg), and blueness of a toe may mean the onset of defective circulation in the feet, with gangrene an imminent possibility. Suction-pressure treatments will frequently restore the circulation by opening up collateral circulatory beds. Massage, whirlpool, and diathermy treatments may also be indicated. *Tobacco must be stopped*, as it brings on arterial spasm, with further decrease of circulation.—LUCY HOBSON, B.S., in *Northw. Med.*, Oct., 1937.

Wassermann Tests in Gonorrhea

• In a series of patients who were treated for gonorrheal urethritis, a Wassermann test was carried out on all such patients at the beginning and end of treatment. Syphilis was thus discovered in 28 patients of the series of 1,000 (approximately three percent). Such early therapy will save these patients from syphilitic heart disease, tabes dorsalis, or brain syphilis.—W. M. BRUNET, M.D., in *Tr. Am. Neisserian M. Soc.*, Feb., 1938.

Sudden, Acute Symptoms

• In sudden, acute conditions, anywhere in the body, look first for lesions of the vascular system or other results of accidents. —LEROY H. SLOAN, M.D., Chicago, Ill.

Migraine, Epilepsy, and Hypothyroidism

• Patients suffering from migraine and epilepsy frequently have a low basal metabolic rate. Three such patients responded dramatically to the administration of from one to two grains of thyroid extract daily. For the recognition of the hypothyroid state, it is important that the basal metabolic determinations be made as near as possible to an impending migraine attack, and never immediately afterward.—A. I. RUBENSTONE, M.D., in *A. J. Dig. Dis.*, July, 1938.

Childbirth and Overweight

• A pregnant woman may be considered overweight who, at the time of delivery, weighs more than 20 percent over the standard weight for her age and height. Such a woman is much more liable to pyelitis, nephritis, and hypertension during the course of pregnancy. She is three times as liable to have a labor of 36 hours or longer as a woman whose weight is less than 20 percent above the normal, and seven times as likely to have a large perineal tear. Puerperal complications are more common in the overweight.—OLE FAGEVICK, M.D., in *Med. Rec.*, Oct. 5, 1938.

Anemia

• Carcinoma of the cecum and right half of the colon is often responsible for anemia, which may be either of the pernicious or secondary type. Before beginning treatment, or on the failure of treatment, examine for colonic cancer.—J. A. BARGEN, M.D., in *J. Ind. S. M. A.*, Feb., 1938.

Control of Diabetes

• A diabetic patient may be considered to be controlled if these four conditions are fulfilled: (1) A balanced diet which is sufficient to maintain normal weight and strength; (2) a normal fasting blood sugar; (3) a 24-hour urine sample that is free from sugar;* and (4) the absence of hypoglycemic reactions.—E. S. DILLON, M.D., and W. W. DYER, M.D., in *Penn. M. J.*, Apr., 1938.

* Those who have had a very wide experience with diabetic patients feel that a slight glycosuria is harmless.—ED.

Thumbnail Therapeutics

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Treatment of Dry, Cracking Nails

• Practitioners will see more and more women who complain of dry and cracked nails, due to use of nail polish. Nail polishes are largely made up of acetone, which dissolves the fat from the nail surface. The following formula may be useful:

℞

Triethanolamine	10 Gm.
White petrolatum	15 Gm.
White Wax	5 Gm.
Anhydrous wool fat	5 Gm.
Water	75 Gm.

Application should be made nightly, and during the day, also, if possible. Rubber finger cots should be worn at night.—*Med. World*, Sept. 23, 1938.

Vitamin B in Nerve Pain

• Pain along nerves can often be relieved by the oral or hypodermic administration of vitamin B. Sydenham's chorea is also often improved by a diet high in vitamin B.—LEWIS A. GOLDEN, M.D., in *New Orleans M. & S. J.*, Aug., 1937.

Metaphen As an Oral Antiseptic

• Experimental research indicates that tincture of Metaphen, 1 to 200, is the most effective agent, both in its germicidal action on the oral mucous membrane and in the duration in time of the antiseptic action. The tincture is convenient to use, because there is very little irritation, the color marks the area to be treated, and it is readily washed off with water.—LLOYD ARNOLD, M.D., in *Am. J. Dig. Dis.*, Sept., 1938.

Pancreatic Extract in Ureteral Pain

• Insulin-free pancreatic tissue extract definitely relaxes the ureter, without systemic disturbance. Renal colic due to stone, stricture, kink, or spasm has been effectively relieved, usually for a long period of time. It is of great value in postcystoscopic colic, in facilitating passage of a catheter beyond an otherwise impassable ureteral stone, in instrumental removal of calculi in the lower ureter, and in dilatation of organic ureteral stricture. From 2 to 4 cc. of the extract are injected intramuscularly. — G. CARRELL, M.D., and F. ZINGALE, M.D., in *South. M. J.*, Mar., 1938.

Acidosis in Prolonged Labor

• Acidosis is a common occurrence during protracted labors, even when sufficient fluid and food prevent dehydration and starvation acidosis. The degree of acidosis increases as labor progresses, and is apparently physiologic, resulting from accumulation of lactic acid following the increased muscular activities.

This acidosis may be corrected by the administration of sodium bicarbonate in 60 Gm. doses at hourly intervals, until relieved. —W. T. PRIDE, M.D., in *Am. J. Ob. Gyn.*, May, 1938.

Treatment of Migraine and Paresthesias

• Paresthesias of the extremities (numbness, tingling), associated with unilateral headache and blanching of the fingers is often associated with a mild hypocalcemia, and is frequently relieved by the administration of viosterol in five-drop doses, three times daily. The diagnosis may be confirmed by having the patient breathe deeply for several minutes, which usually results in the appearance of the paresthesias. The blood calcium is found to be at low normal or definitely subnormal. Major and minor epileptic attacks were found to be associated with hypocalcemia in some cases.—G. F. NORMAN, M.D., F.A.C.S., in *West. J. Surg., Ob. and Gyn.*, Oct., 1938.

Hemorrhoids and Prostatic Hypertrophy

• Both hemorrhoids and prostatic enlargement occur in middle and later life; both are frequently coexistent; and relief of prostatic symptoms often follows the removal or injection of hemorrhoids.—J. F. MONTAGUE, M.D. in *Med. Rec.*, Feb. 2, 1938.

Treatment of Burns of the Eye

• After experimental study, I find that burns caused by acids are best treated with tap-water, and that alkali burns are best treated by 2-percent acetic acid, or other very weak acid irrigations. (In an emergency, diluted vinegar may be used.—ED.). The difference is due to the fact that acid proteinates are insoluble and alkaline proteinates are soluble.—W. B. HUBBARD, M.D., in *Br. M. J.*, Jan. 22, 1938.

THE DOCTOR'S STUDY

New Books

Any book reviewed in these columns will be procured for our readers if the order, addressed to CLINICAL MEDICINE AND SURGERY, Waukegan, Ill., is accompanied by a check for the published price of the book.

If you read at all, you should read enough to acquire judgment of what you read.—W. J. CAMERON.

Abdominal and Pelvic Surgery

KENNEDY

PRACTICAL SURGERY OF THE ABDOMINAL AND PELVIC REGIONS. *By James William Kennedy, M.D., F.A.C.S., Surgeon-in-Chief to the Joseph Price Hospital, Philadelphia; Consulting Surgeon to the Norristown, Coatesville, and Chambersburg Hospitals; Formerly in Charge of the Gynecological and Obstetrical Department of the Philadelphia Dispensary; Member of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons, etc. 3rd Ed. Illustrated with 133 Original Half-Tone Plates, Some in Color. Philadelphia: F. A. Davis Company. 1937. Price, $7.50.*

IT IS refreshing to encounter a medical text which is original from cover to cover and deals only with matters of which the author has had extensive personal experience. This is a book of that kind. There is not one bibliographic reference in the entire volume, nor is it padded with case reports.

Dr. Kennedy, like his teacher, Dr. Joseph Price, is a man who cares far more about clinical results than he does about "authorities," and personal conversation with men who know his work, convinces one of the fact that he *gets the results*, whatever the "authorities" may say or think about his methods, which in some instances are, frankly, "heterodox." though never without a sound basis of anatomy, physiology, and common sense.

This is not a reference work on general surgery, nor even on the surgery of the regions mentioned in the title, but a strictly practical *handbook*, well printed and well bound. describing *in detail* and with exceptionally clear diagrammatic illustrations, just how to do a number of more or less unusual surgical operations, which long experience has demonstrated will give highly satisfactory clinical results. A small sample of the kind of illustrations and descriptions used in this volume will be found in Dr. Robertson's article on "Vaginal Hysterectomy," in this issue.

In addition to vaginal hysterectomy, operations for appendicitis, ectopic gestation, repair of the cervix, abdominal hysterectomy, inguinal hernia, and ten other conditions, are described in similar detail. The other nine chapters, which make up the rest of the text, deal with general surgical subjects, such as surgical shock, ligature and suture material, the toilet of the hands and rubber gloves, etc., in the same direct and usable manner.

While the strictly specializing surgeon will find much here that might well improve his morbidity and mortality statistics, this collection of clinical notes (it can scarcely be called a treatise) is directed especially to the "occasional operator"—the general clinician who aspires to do as much as possible of his own surgical work, and has enough anatomic knowledge, manual dexterity, and surgical judgment to make such a course feasible.

No matter how many other surgical works one's library may contain, it has no substitute for this one, because it is unique in its field, and the few dollars spent for it are strictly an *investment*, for any man who does surgery at all.

The Pneumonias

REIMANN

THE PNEUMONIAS. *By* HOBART A. REIMANN, M.D., *Professor of Medicine, Jefferson Medical College, Philadelphia; Formerly Professor of Medicine, University of Minnesota; etc. With a Foreword by Rufus Cole. 381 Pages; 111 Illustrations. Philadelphia and London: W. B. Saunders Company. 1938. Price, $5.50.*

THE physician no longer can be a mere observer of the course of pneumonia;

he must act promptly and with skill. Less emphasis is to be put upon the anatomic diagnosis, as "lobar" or "bronchopneumonia," and more upon the discovery of the etiologic factor; i.e., the bacteria concerned, because it is in this way that we can control the mortality of the disease.

It still is not widely known that pneumonia serum may be used in cases of bronchopneumonia, as well as in lobar pneumonia, if the pneumococcus is the causative factor.

Dr. Reimann groups pneumonias into lobar and "atypical" types, the latter to include those formerly labeled bronchopneumonia.

Full details of technic for the administration of pneumonia serum are given, including indications, contraindications, dosage, and treatment of serum reactions. Various clinical and pathologic aspects of the various pneumonias are well covered, including the variations in course dependent upon the bacterial factor. He has presented his new work on pneumonia which is caused by a virus.

Practice of Medicine

OSLER

THE PRINCIPLES AND PRACTICE OF MEDICINE. For the Use of Practitioners and Students of Medicine. *Originally Written by The Late Sir* WILLIAM OSLER, BART., M.D., F.R.C.P., F.R.S., *Formerly Regius Professor of Medicine, Oxford University; Professor of Medicine, Johns Hopkins University, et cetera. Revised by Henry A. Christian, M.D., LL.D., S.D., F.R.C.P., Hersey Professor of the Theory and Practice of Physic, Harvard University; Physician in Chief, Peter Brent Brigham Hospital, Boston. The 9th, 10th, 11th, and 12th Editions of This Book Were Revised by Thomas McCrae, M.D., F.R.C.P., Formerly Professor of Medicine, Jefferson Medical College, Philadelphia. Thirteenth Edition. New York and London: D. Appleton-Century Company, Inc. 1938. Price, $9.00.*

WHEN a textbook reaches an advanced age, it assumes the characteristics of the clinicians who have moulded and revised it. This last edition of "Osler" contains hundreds of valuable points on clinical diagnosis and differential diagnosis. On leafing through the book, such comments as these stand out as helpful landmarks: "Recurring attacks of pneumonia, especially in the lower lobe of the lung, first on one side and then on the other, should arouse the suspicion of bronchiectasis."

There is evidence of the revision of certain topics, notably the deficiency diseases, which brings the book up to date. The hyperkeratosis of vitamin A deficiency and the use of nicotinic acid in pellagra are described. A few sections of the work could stand the scrutiny of experts in the respective fields. Pediatricians will read with surprise that surgery is the only successful treatment for hypertrophic pyloric stenosis (what price thick feedings, phenobarbital, and atropine?). Otolaryngologists will discover that repeated colds lead to "chronic colds." No mention is made of recent advances in the treatment of hydronephrosis ("cases of intermittent hydronephrosis which do not cause serious symptoms should be let alone"). Dr. Christian, in his preface, states that, in preparing this revision, he had neither the assistance nor criticism of any one.

Diseases of the Skin

ANDREWS

DISEASES OF THE SKIN. For Practitioners and Students. *By* GEORGE CLINTON ANDREWS, A.B., M.D., *Associate Professor of Dermatology, College of Physicians and Surgeons, Columbia University; Chief of Clinic, Department of Dermatology, Vanderbilt Clinic; Consulting Dermatologist and Syphilologist to Tarrytown Hospital, Grasslands Hospital, Valhalla, St. Johns Hospital, Yonkers, and Broad Street Hospital; Fellow of the American College of Physicians, etc. Second Edition. Philadelphia and London: W. B. Saunders Company. 1938. Price, $10.00.*

DR. ANDREWS' text is immensely helpful to the general practitioner because the illustrations and photographs are so clear that they may be used in comparison with an actual skin lesion.

The second edition includes seventy-five new diseases, and there are new chapters on dermatoses due to filterable viruses, vitamin deficiencies, and cutaneous infiltrations with products of metabolism. There has been complete revision of the chapters on roentgen rays, syphilis, eczema, lichen planus, fungous diseases, and tropical diseases. Allergy and sensitization tests have been fully covered in the light of recent knowledge.

For quick aid in the diagnosis of skin diseases, the chapter on "Regional Predilection" is recommended. The practitioner will do well to remember that dryness and roughness on the thighs and forearms are the first signs of vitamin A deficiency.

Hematologic Technic

BECK

A LABORATORY MANUAL OF HEMATOLOGIC TECHNIC. *By* REGENA COOK BECK, M.A., M.D., *Formerly Instructor in Pathology and Bacteriology at George Washington University Medical School; Head of the Department of Bacteriology, William and Mary College Extension; Pathologist to Stuart Circle Hospital and Director of the Stuart Circle Hospital School of Medical Technology, Richmond, Virginia. Foreword by F. W. Konzelmann, M.D., Professor of Clinical Pathology, Temple University, Philadelphia. 380 Pages; 70 Illustrations. Philadelphia and London: W. B. Saunders Company. 1938. Cloth, $4.00.*

THIS volume presents, for the first time within the covers of one book, all the valuable clinical and laboratory procedures necessary in the evaluation of the blood constituents, and their interpretation in terms of disease. Although written primarily for medical technicians, it appears to be just as valuable for medical students and practitioners who must perform their own tests.

Many new procedures are given which are of interest to the practitioner. The venous pressure method of determining bleeding time is simple. A sphygmomanometer

is applied and kept at about 40 mm. pressure. The posterior portion of the forearm, near the elbow, is punctured with a plain needle, as used in obtaining a drop of blood for blood count, to a depth of ⅛ inch. At half-minute intervals, blot with a piece of absorbent paper all of the blood which has flowed out. This results in a series of blots which should gradually decrease in size until none are present at the end of three or four minutes. This test will indicate a bleeding tendency, especially in jaundice, that cannot be detected by the usual methods.

Dr. Beck constantly cautions against mistaking slight deviations from the normal as indicative of disease. For example, she mentions as a standard these leukocyte counts: For an adult, 7,500; for an infant, 10,000 to 12,000; and somewhat below 10,000 for older children. She states, "The normals usually given (5,000 to 10,000) include only 8 percent of healthy persons; *one healthy person in five examined will have a count outside this range.*"

The book throughout is definite, brief, and clear. It should be on every laboratory shelf.

Urology

EISENDRATH AND ROLNICK

UROLOGY. *By* DANIEL N. EISENDRATH, M.D., *Consulting Urologist to the American Hospital, Paris, France; Formerly, Attending Urologist, Michael Reese and Cook County Hospitals; Assistant Professor of Surgery (Genito-Urinary) Rush Medical College of the University of Chicago; and Harry C. Rolnick, M.D., Attending Urologist, Michael Reese, Mt. Sinai, and Cook County Hospitals, Chicago; Formerly Clinical Professor of Urology, Loyola University Medical School. Fourth Edition, Entirely Revised. 750 Illustrations in Black and White; 12 in Color. Philadelphia, Montreal, London: J. B. Lippincott Company. 1938. Price, $10.00.*

THIS VOLUME seems to combine all the good features of a text and a reference work on urology. There are many practical features of value in office practice. The illustrations themselves are of value, because they are modern, both in the subjects sketched and in the technic of artistry.

The wide experience of the authors is evident in the various practical suggestions that are made throughout the work. In view of the current vogue for local anesthesia, which is often used without a sound anatomic knowledge, this statement is of interest, "Punctured wounds of the corpora cavernosa, produced by infiltrating deep into the corpora cavernosa of the penis (as for circumcision), may in some instances be followed by considerable hemorrhage and, later, secondary infection."

Unsuccessful prostatectomies are still being performed by older surgeons, who believe that every case of urinary obstruction at the bladder outlet, occurring in older males, is due to prostatic hypertrophy. "We must approach every case giving the history of acute or chronic retention of urine, both in children and after middle life, without a preformed opinion as to the nature of the cause." Prostatectomy will be of little avail if the obstruction is a bar at the vesical neck.

There has been extensive revision and modernization of the sections on anesthesia, gonorrhea, seminal vesiculitis, sex neuroses, prostatic hypertrophy, and urinary tract stone.

For those who must perform surgery on these organs, the operative technic and postoperative treatment are clearly outlined and well illustrated.

Asphyxiation and Resuscitation

HENDERSON

ADVENTURES IN RESPIRATION; Modes of Asphyxiation and Methods of Resuscitation. *By* YANDELL HENDERSON. *Baltimore: The Williams & Wilkins Company. 1938. Price, $3.00.*

LET those physicians who believe that scientific men are the first to accept facts, study this book. For 15 years, Henderson preached the gospel of carbon dioxide deficiency as the most important factor in asphyxia. As this was in direct contradiction to the "acidosis" theory, now well laid to rest, his teachings were disregarded.

By an indirect maneuver, he succeeded in demonstrating that the administration of carbon dioxide does stimulate respiration, and his method is now widely used in resuscitation of asphyxiated individuals, whether it be postoperatively or neonatally.

The practical physician will find many points of value which are brought out in the discussion: That transfusion is indicated in hemorrhage because the added red blood cells carry sufficient oxygen to prevent asphyxia; that the Cheyne-Stokes breathing of congestive heart failure may be relieved by inhalations of oxygen and/or carbon dioxide, or simply by breathing into a bag (and thus inhaling one's own carbon dioxide); and that postoperative inhalations of carbon dioxide-oxygen will quickly aid the body in removing any gaseous anesthetic and stimulate the circulation.

The book makes pleasant reading for an "off hour" or in the evening, as Dr. Henderson writes well.

Plastic Surgery

BARSKY

PLASTIC SURGERY. *By* ARTHUR JOSEPH BARSKY, M.D., D.D.S., *Associate Surgeon in Charge of the Department of Reconstructive Surgery, Beth Israel Hospital, New York City; Adjunct Professor of Plastic Reparative Surgery, New York Polyclinic Medical School and Hospital; Associate Plastic Surgeon to the Morrisiania City Hospital, New York City; etc. 355 Pages, 432 Illustrations. Philadelphia and London: W. B. Saunders Company. 1938. Price, $5.75.*

DR. Barsky's book is brief, well illustrated, and to the point. It makes no attempt to cover the entire field of plastic surgery in minute detail, but does outline the most important operative procedures

and their indications. Pre- and postoperative photographs, steps in technic, and operative sketches make the subject very clear.

Clinical facts and contraindications are expressed in a brief and clear manner. The wisdom is that gained through long practical experience, and is of the type that is too often left out of surgical works.

Every detail of preparation and postoperative care is considered. The technics of free and pedicled skin grafts; tissue transplantation; treatment of wounds, burns and frostbite; treatment of keloids and scars; plastic surgery around the eye, nose, ears, lips, cheeks and jaws, neck, trunk and extremities; and fractures of the facial bones are presented.

Cosmetic surgery, including repair of the vermilion border of the lips, is well discussed, as the author feels that, if the competent surgeon does not handle such cases, the patient will go to the quack.

The procedure for forming an artificial breast, as a replacement for a breast removed by amputation, is illustrated. A simple technic for removing a depressed scar around the cheeks or neck following incision of an abscess is discussed and pictured. A number of technics are given for cosmetic surgery of the nose.

Dr. Barsky has kept the size of the volume down by illustrating the *one best method*, instead of giving a number. This book cannot be too strongly recommended.

Internal Medicine

MUSSER

INTERNAL MEDICINE. Its Theory and Practice, in Contributions by American Authors. *Edited by* JOHN H. MUSSER, B.S., M.D., F.A.C.P., *Professor of Medicine, Tulane University of Louisiana School of Medicine; Senior Visiting Physician to the Charity Hospital, New Orleans, Louisiana. Third Edition, Thoroughly Revised. 1,428 Pages, Illustrated. Philadelphia: Lea & Febiger. 1938. Price, $10.00.*

TWENTY-SEVEN American clinicians make this a great reference volume. This third edition presents 130 pages of new material, which have been added during the course of an extensive revision.

New material has been added on influenza, furunculosis, streptococcic meningitis, treatment of streptococcal infections, undulant fever, tetanus, tularemia, contagious diseases of childhood, and Haverhill fever. The section on diseases of the heart has been thoroughly revised, and material on gastroscopy, disorders of the duodenum, regional enteritis, and peritoneal tuberculosis has been added. The section on endocrinology has been almost completely changed.

The material is written up in an interesting, sane manner, as shown by this paragraph from the chapter on peptic ulcer: "When one studies the results obtained by various ulcer diets, it is of interest that a certain percentage of the patients do well, whereas others continue to have symptoms or to relapse, regardless of just which treatment scheme is employed. Long experience has convinced the writer that it is usually not so much *what* the patient eats as *how he eats it*; the general therapeutic regimen and dietary hygiene are all-important."

The book is divided into four chief sections: (1) Infectious diseases; (2) systemic diseases; (3) diseases of nutrition, allergy, metabolism, physical and chemical agents; and (4) diseases of the nervous system. The authors have avoided the therapeutic nihilism so noticeable in many textbooks which have gone through several editions.

Popular Dietetics

BUCKSTEIN

EAT AND KEEP FIT. *By* JACOB BUCKSTEIN, M.D., *Consulting Physician in Diseases of the Stomach and Intestines to the Central Islip Hospital; Visiting Roentgenologist, Alimentary Tract Division, Bellevue Hospital; Formerly Consultant in Gastroenterology to the United States Public Health Service; Author of "Food, Fitness and Figure," "Peptic Ulcer," and "Functional Disorders of the Large Intestine and Their Treatment." New York: Emerson Books. 1938. Price, $1.00.*

FOR those of one's patients who wish to actually know something about diet, what makes up a balanced diet, and how to reduce safely, this little book may well be recommended.

The discussion on loss of weight through subtraction of calories impresses itself very well on the logical mind. The average patient would scarcely have the patience to read all of the first chapters on the basic knowledge of diet ("Where Does Our Food Come From"; "Nitrogen"; "Fuel for the Human Machine"; "The Importance of Minerals"; "How Vitamins Guard Our Health"; "In Praise of Milk"), but he should be instructed to study "How Emotions Influence Digestion"; "Facts and Fancies about Food"; and the "Weigh of All Flesh."

The harmfulness of commercial weight-reducing preparations is stressed. Fourteen-day diets to reduce and to gain weight are given in detail.

Physical Diagnosis

LOEB

MARTINI'S PRINCIPLES AND PRACTICE OF PHYSICAL DIAGNOSIS. *Edited by* ROBERT F. LOEB, M.D., *Professor of Medicine, College of Physicians and Surgeons, Columbia University and Presbyterian Hospital, New York City, from the Authorized Translation by George J. Farber, M.D., Assistant in Roentgenology, Johns Hopkins University, School of Medicine. Second Edition, 30 Illustrations. Philadelphia: J. B. Lippincott Company. 1938. Price, $2.00.*

HERE is evidenced the work of master clinicians in making up a brief, practical volume on diagnosis by physical examination. The overemphasis on laboratory procedures should necessitate the reading of such books, by medical students and practitioners.

Many pointers are given on physical diagnosis. For example, as a simple test in determining the efficacy of the abdominal muscles, the patient is instructed to sit up from the recumbent position and the muscular action is studied. Inspection is accorded a large part in the making of a diagnosis.

Fractures of the Jaw

IVY AND CURTIS

FRACTURES OF THE JAW. *By* Robert H. Ivy, M.D., D.D.S., F.A.C.S., *Professor of Maxillo-Facial Surgery, School of Medicine and Graduate School of Medicine, and of Clinical Maxillo-Facial Surgery, School of Dentistry, University of Pennsylvania; Chief of Maxillo-Facial Surgery, Graduate Hospital, Philadelphia, Pa., etc.;* and Lawrence Curtis, A.B., M.D., D.D.S., F.A.C.S., *Assistant Professor of Maxillo-Facial Surgery, Graduate School of Medicine, and School of Dentistry, University of Pennsylvania, Philadelphia, etc. Second Edition, Revised. 192 Pages, 199 Engravings. Philadelphia: Lea & Febiger. 1938. Price, $4.50.*

THE AUTHORS have done a valuable work, in that they have emphasized the simple methods of handling jaw fractures. The standard works on surgery so often mention expensive and intricate devices, as the interdental splint, which are very rarely necessary. Drs. Ivy and Curtis use only brass wire, hemostats, and a towel hook, in caring for many fractures of the lower jaw.

Full details are given for the treatment of every type of fracture of the maxilla and mandible, including treatment of malunion, infection, and other complications. Operative and non-operative technic is described and illustrated. Not the least valuable feature of the book is the correlation between clinical and roentgenologic aspects of patients with various fractures, by means of photographs during treatment which illustrate the steps in their care and end-results, portrayed pictorially and by roentgenogram.

Every surgeon, isolated general practitioner, and dentist should have this monograph.

Anus, Rectum, and Sigmoid Colon

BACON

ANUS, RECTUM, SIGMOID COLON. Diagnosis and Treatment. *By* Harry E. Bacon, B.S., M.D., F.A.C.S., F.A.P.S., *Assistant Professor of Proctology, Temple University; Assistant Professor of Proctology, University of Pennsylvania Graduate School of Medicine; Visiting Proctologist, St. Luke's and Children's Hospital; etc. Introduction by W. Wayne Babcock, M.D., LL.D., F.A.C.S., Professor of Surgery, Temple University School of Medicine. Foreword by J. P. Lockhart-Mummery, M.A., M.B., F.R.C.S., Emeritus Surgeon, St. Mark's Hospital, London, England. 487 Illustrations. Philadelphia, Montreal, London: J. B. Lippincott Company. 1938. Price, $8.50.*

WITHIN a generation, proctology has attained an important position as a specialty in medicine. Not only are the diseases treated so common as to be encountered by every general practitioner, but advances in this field have been so rapid that it is difficult to be familiar with the latest and most approved practice unless one is devoting most of his time to the subject. The office treatment of many anorectal diseases, formerly exploited by itinerants, has been placed on a scientific basis. *Through local examination alone, the proctologist and the trained practitioner may diagnose an overlooked case of tabes dorsalis or pulmonary tuberculosis;* the cause of an abscess, neuritis, myalgia, vesical disorder; a parasitic intestinal infection; the presence of the most common tumors of the intestinal tract; and many other conditions besides the common hemorrhoids, fissures, fistulas, cryptitis, and the like.

Any book that purports to discuss a surgical specialty should be well illustrated. William Brown McNett's drawings are lifelike and anatomically sound. One cannot conceive of any superior method of illustration, especially of pathologic specimens and step-by-step operative procedures.

The Prevention of Puerperal Sepsis; Antisepsis in Midwifery

COLEBROOK

THE PREVENTION OF PUERPERAL SEPSIS. *By* L. Colebrook, M.B., B.S. *(Lond.), Member of the Scientific Staff of the Medical Research Council; Hon. Director Research Laboratories.* ANTISEPSIS IN MIDWIFERY. *By* L. Colebrook and W. R. Maxted. *With a Foreward by Sir* Comyns Berkeley, M.C., M.D., F.R.C.P., F.R.C.S., M.M.S.A. *(Hon.), F.C.O.G. London, New York and Toronto: Oxford University Press. 1938. Price, $1.00.*

PUERPERAL infections may be divided into two categories, according to Colebrook. First are those which are intimately associated in their origin with injury to the maternal tissues during the process of childbirth. Some of these injuries are unavoidable, but many are the result of bad craftsmanship. The bacterial infections which complicate such injuries vary in character.

The hemolytic streptococcus is probably associated with one-half or less of such injuries, but when it is, the clinical picture becomes more alarming. The more common etiologic factors are those bacteria which are commonly found about the vaginal orifice, including the non-hemolytic streptococci, bacillus coli, and staphylococcus.

The second category of puerperal infections comprises cases in which childbirth has been accompanied by little or no trauma, and the ensuing puerperal fever is due to the arrival of the hemolytic streptococcus in the mother's genital tract. He uses the word "arrival" to denote that such bacteria come from outside the genital tract, in contradistinction to the older viewpoint that such infection was autogenous in nature. By careful experimentation, he has proved that the infection may be transmitted from a case of otitis media, tonsillitis, a "cold," or

other infection of the physician, nurse, or member of the family. In home deliveries, careful inquiry must be made as to previous or present infections, especially of the upper respiratory tract. In hospitals, the same nurses should not care for obstetric patients and surgical patients, especially those suffering with infections or infected wounds; and nurses with colds and other infections should not be permitted on the floor, even when wearing masks. Swabs may be taken from any suspected individual's throat or nose, be it doctor or nurse, and sent in for examination. If hemolytic streptococci are found, the person should not care for obstetric patients.

Dettol, a proprietary antiseptic, and a one- or two-percent watery iodine solution were found to be the most effective antiseptics for application to the hands, after scrubbing, and to the patient's vulva and contiguous areas.

With proper care, it appears that over half of the cases of puerperal fever may be prevented.

New Books Received

The following books have been received in this office and will be reviewed in our pages as rapidly as possible.

ALLERGIC DISEASES THEIR DIAGNOSIS AND TREATMENT. *By Ray M. Balycat, M.A., M.D., F.A.C.P. Assisted by Ralph Bowen, B.A., M.D., F.A.A.P. 5th Edition, Revised and Enlarged. Philadelphia: F. A. Davis Company. 1938. Price, $6.00.*

THE PHYSIOLOGY OF ANESTHESIA. *By Henry K. Beecher, A.B., A.M., M.D. New York: Oxford University Press. 1938. Price, $3.75.*

DIE EIWEISSKORPER DES BLUTPLASMAS. *Edited by Dozent Dr. H. Bennhold, Dr. E. Kylin and Professor Dr. St. Ruszmyak. Dresden and Leipzig: Verlag von Theodor Steinkopff. 1938. Price, RM 38.—, paper bound; RM 40.—, cloth bound.*

PEDIATRIC SYMPTOMATOLOGY AND DIFFERENTIAL DIAGNOSIS. *By Sanford Blum, A.B., M.S., M.D. Philadelphia: F. A. Davis Company. 1938. Price, $5.00.*

A HANDBOOK OF ROENTGEN AND RADIUM THERAPY. *By A. J. Delario, B.A., M.D. Philadelphia: F. A. Davis Company. 1938. Price, $10.00.*

CARBON MONOXIDE ASPHYXIA. *By Cecil K. Drinker, M.D., D.Sc. New York: Oxford University Press. 1938. Price, $4.50.*

BIG FLEAS HAVE LITTLE FLEAS. Or Who's Who Among the Protozoa. *By Robert Hegner. Based on Messenger Lectures, Cornell University, 1937. Baltimore: The Williams & Wilkins Company. 1938. Price, $3.00.*

INSULIN. Its Chemistry and Physiology. *By Hans F. Jensen, Ph.D. New York: The Commonwealth Fund. 1938. Price, $2.00.*

SILICOSIS AND ASBESTOSIS. *By Various Authors. Edited by A. J. Lanza, M.D. New York: Oxford University Press. 1938. Price, $4.25.*

DISEASES OF THE EAR, NOSE AND THROAT. *By Francis L. Lederer, B.Sc., M.D., F.A.C.S. Philadelphia: F. A. Davis Company. 1938. Price, $10.00.*

SPINAL ANESTHESIA. *By Louis H. Maxson, A.B., M.D. Foreword by W. Wayne Babcock, M.D., LL.D., F.A.C.S. Philadelphia: J. B. Lippincott Company. 1938. Price, $6.50.*

HOW TO CONQUER CONSTIPATION. A Series of Answers to Questions Which Have Occurred with Frequency in the Practice of a Specialist in Intestinal Ailments. *By J. F. Montague, M.D. Philadelphia: J. B. Lippincott Company. 1938. Price, $1.50.*

CRANIO-CEREBRAL INJURIES. Their Diagnosis and Treatment. *By Donald Munro, A.B., M.D., F.A.C.S. New York: Oxford University Press. 1938. Price, $4.00.*

SHOCK AND RELATED CAPILLARY PHENOMENA. *By Virgil H. Moon, A.B., M.Sc., M.D., New York: Oxford University Press. 1938. Price, $3.50.*

THE PRINCIPLES AND PRACTICE OF PERIMETRY. *By Luther C. Peter, A.M., M.D., Sc.D., LL.D., F.A.C.S. 4th Edition, Thoroughly Revised. Philadelphia: Lea & Febiger. 1938. Price, $4.50.*

MARGARET SANGER. An Autobiography. *New York: W. W. Norton & Company, Inc. 1938. Price, $3.50.*

MODERN SURGICAL TECHNIC. *By Max Thorek, M.D., K.L.H. (France), K.C. (Italy). With a Foreword by Donald C. Balfour, M.B., M.D., (Tor.), LL.D., F.A.C.S., F.R.A.C.S. Complete in Three Volumes. Philadelphia: J. B. Lippincott Company. 1938. Price, $33.00.*

PHYSICAL THERAPY. Theoretical and Clinical. *By Joseph E. G. Waddington, M.D., C.M. (Bennett). With an Introduction by Walter J. Turrell, M.A., D.M., B.Ch. (Oxon.), D.M.R. & E. (Cantab.). St. Paul and Minneapolis: Bruce Publishing Company. 1938. Price, $5.50.*

THE FUNDAMENTALS OF INTERNAL MEDICINE. *By Wallace Mason Yater, A.B., M.D., M.S. (in Med.). New York: D. Appleton-Century Company. 1938. Price, $9.00.*

MEDIZINISCHE PRAXIS SERIES. Volume 26. Chirurgie Der Lungen und des Brustfelles. *By Dr. Alfred Brunner. Dresden and Leipzig: Verlag von Theodor Steinkopff. 1938. Price, RM 22.50, paper bound; RM 24.—, cloth bound.*

THE STRUGGLE FOR EXISTENCE

Infectious diseases are one of the great tragedies of living things—the struggle for existence between different forms of life. Man sees it from his own prejudiced point of view; but clams, oysters, insects, fish, flowers, tobacco, potatoes, tomatoes, fruit, shrubs, trees, have their own varieties of smallpox, measles, cancer, or tuberculosis. Incessantly, the ruthless war goes on, without quarter or armistice—a nationalism of species against species.—HANZ ZINSSER, *in "Rats, Lice and History."*

Medical News

Courtesy, Westinghouse Electric & Mfg. Co.

The First Welded Hospital

FREED FROM the machine-gun rattle of the rivet hammer, the 13-story Woman's Hospital of Pittsburgh has risen silently during 58 noiseless working days, in the midst of the University of Pittsburgh's Medical Center. In fact, the 1,000 tons of steel for Pittsburgh's first arc-welded building were joined to the new Presbyterian Hospital; less than 200 feet away are the Eye and Ear Hospital and the Children's Hospital. The staccato beat of riveters was the last thing the physicians would prescribe for the hundreds of patients in these hospitals.

The masked welder in the picture above is joining two beams. The bolts in the forefront temporarily hold the steel in place while electricity merges the two pieces.

When completed, within the next year, the Woman's Hospital will be one of three in the entire country devoted exclusively to a study and treatment of gynecologic conditions. In addition to the laboratories and therapeutic rooms, its six hospital floors will accommodate 150 patients.

Horses May Carry Encephalitis

A RECENT REPORT from the Rockefeller Institute announced that an outbreak of human "sleeping sickness" (encephalitis lethargica), which occurred in Massachusetts last September, had been traced to horses suffering from encephalomyelitis, a well known animal disease, never heretofore connected with a human malady.

Since the viruses of many diseases virtually disappear between epidemics, many attempts have been made to find non-human "carriers," but hitherto without success. This discovery may prove to be highly important.

New Projection Machine

MEDICAL MEETINGS, these days, are darkened by a spilth of lantern slides, many of which are of little value to most of the audiences, except by giving them a chance to catch up on their sleep. The *Newark* (N. J.) *Evening News* for October 7, 1938, reports the use of an apparatus which will project actual organs or other solid bodies, in their natural colors and with the appearance of three dimensions. Such a machine should have real teaching value, though we seem to remember having seen something of the sort several years ago. Perhaps this is a better one.

Sulfanilamide in Trachoma

THE UNITED STATES Bureau of Indian Affairs reports that the most encouraging treatment of trachoma so far found is sulfanilamide. In one series of 140 cases, 114 were apparently cured. Results are said to be best in early cases, but even cases of long standing are improved. Sufficient time has not yet elapsed to demonstrate that these "cures" will prove permanent.

I like CLINICAL MEDICINE AND SURGERY, for it is a great help in my work and I am always watching for every issue and hope I can have the issues on time.—Miss L. M. S. (Pharmacist), Philippine Islands.

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6 Dr. Weirick's Sanitarium. Dr. G. A. Weirick.

9 Elixir Bromaurate in the Treatment of Whooping Cough and other Persistent Coughs. Report of Cases. (Booklet.) Gold Pharmacal Co.

11 Chondroitin; for Treatment of Idiopathic Headache. The Wilson Labs.

15 Cough—Its Symptomatic Treatment. Martin H. Smith Co.

17 Feeding Diabetic Patients. Knox Gelatine Labs.

19 Menstrual Regulation by Symptomatic Treatment. Martin H. Smith Co.

20 Hyperol. A Utero-Ovarian Tonic and Corrective. Purdue Frederick Co.

21 Gray's Glycerine Tonic Comp. Purdue Frederick Co.

22 Feeding Sick Patients. Knox Gelatine Labs.

25 Clinical Guide for Female Sex Hormone Therapy. Schering Corp.

27 Reducing Diets and Recipes. Knox Gelatine Laboratories.

31 Laboratory Tests to Determine the Germicidal Efficiency of the Vapors from the Cresols of Coal Tar. Vapo-Cresolene Co.

33 Foot Weakness and Correction for the Physician. The Scholl Mfg. Co., Inc.

38 Protecting the Expectant Mother. Corn Products Sales Co.

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51 Formaldehyde for Urinary Antisepsis. Schering & Glatz, Inc.

54 Use of Zinc Borate in Otolaryngology. Hille Laboratories.

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89 Free Iodine as a Therapeutic Agent. Burnham Soluble Iodine Co.

91 Adrenal Cortex; for the Treatment of Addison's Disease and Asthenia. The Wilson Labs.

95 Low Cholesterol, Low Fat, Low Caloric Diet List for Distribution to Patients. Burnham Soluble Iodine Co.

96 Eburol, a Healing Ointment for Burns, Wounds and Ulcers. Ernst Bischoff Co.

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100 Neo-Plasmoid. The Modern Solution For the Injection Treatment of Hernia. Farnsworth Labs.

105 Ovoferrin. Iron in its Most Efficient Subdivision. A. C. Barnes Co.

110 Parenteral Calcium Therapy—A Review of the Literature with Comprehensive Bibliography. Loeser Laboratory, Inc.

111 Argyrol in Ophthalmology. A. C. Barnes Company.

112 Oxygen-Ozone and Octozone. Octozone Equipment Co.

116 Alparene—An Effective Sclerosing Solution for the Injection Treatment of Hernia. Dequin Physicians' Products Co.

123 Resumé of Venereal Therapy. Mallinckrodt Chemical Works.

124 Soricin in the Treatment of Intestinal Toxemia. The Wm. S. Merrell Company.

126 Subenon—Anti-arthritic and Anti-rheumatic. Seydel Chemical Co.

130 Allantoin Ointment 2% in Slow and Non-healing Wounds and in Burns. The National Drug Co.

135 Argyrol in Otorhinolaryngology. A. C. Barnes Co.

137 Barium Sulfate. Resumé of Use in Alimentary Roentgenology. Mallinckrodt Chemical Works.

139 Standardization of Estrogenic Hormone. Reed & Carnrick.

140 Paramon—Analgesic. Seydel Chemical Co.

142 Anabolin. A Detoxicative Hormone from the Liver. The Harrower Laboratory, Inc.

143 The Physicians' Conquest of Syphilis. The Tilden Co.

145 ZymenoL—to Aid Normal Evacuation Without Irritant Drugs or Bulk-producing Agents in Both Constipation and Colitis. Otis E. Glidden & Co., Inc.

146 Moru-Quin for Injection Treatment of Varicose Veins. The National Drug Co.

148 Ampoule Products for Subcutaneous, Intramuscular, and Intravenous Medication. Associated Physicians Labs.

150 Constipation and Hemorrhoids. Wm. R. Warner & Co.

151 Cofron Liver Concentrate. Abbott Laboratories.

153 Haliver Oil with Viosterol. Abbott Labs.

154 Cyclopropane for Anesthesia. Mallinckrodt Chemical Works.

155 Alkali or Calcium, Which Shall It Be? Wm. R. Warner & Co., Inc.

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